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VOL. 14 APRIL, 1907 No. 4

Be Good for Something: Rustle!

"Be not simply good, be good for something," said Thoreau. You may be a rattling good fellow and a walking medical encyclopedia—but that isn't all your patients want. They want a man who can cure Johnnie of the whooping-cough, who won't let father die when he has pneumonia; who can operate upon the hired man for appendicitis, and successfully, if an operation must be had. They want a real man, and you want to be that kind of a man,—one who is "good for something" to them—good, better, best and the "best" possible!

The aim of CLINICAL MEDICINE is to help to make you just such a man, a REAL doctor; to enable you to use, to the uttermost, every convolution of your gray matter; to fill you with practical ideas that will help you to cure your patients; to give you a forum from which to receive and transmit to others methods that will help; to acquaint you with the best medicinal tools; to fill you with optimism and inspire you with love for your profession; in short to make you not merely worth "something" to your patients, but—everything!

Are we doing this for you? Are we giving you your money's worth and more too? Do you find us square and true? Can YOU take us at net? If not, say so and help us to get right; if so, then pass the word along—Reciprocate—Renew promptly and see that your friends all come in: Rustle! Do something; Do it now, and Keep Doing! Don't be a clam. Have a mind of your own and use it.

THE CLINIC PUBLISHING COMPANY
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THE DOCTOR AND THE DRUGGIST

The evolution of pharmacy in relation to the question of "Prescribing vs. Dispensing." Why the present efforts to stop physicians from dispensing must fail. A plea for readjustment

IN preceding numbers of this journal we have discussed some of the reasons why so many doctors dispense their own remedies instead of writing prescriptions. We hope that we have not left the impression that we have any unkind feelings toward the pharmacist. Not so; for the honest, earnest and skilful men who constitute the bulk of his profession we have not only a kindly and fraternal feeling but the utmost respect. We owe them much.

But between pharmacy as a profession and the pharmacy as a store there is a great deal of difference. The professional element is rapidly disappearing and the "store" feature is as rapidly taking its place. This is due to no essential defects in the men in the business; it is the result of industrial evolution.

Time was when the pharmacist personally dealt in crude herbs and himself prepared a large portion of his stock. That time has gone by forever. Now the only part of his work which has anything about it requiring scientific knowledge is in the compounding of prescriptions; and with the simplification of therapeutic methods and the perfection of the products of the manufacturing chemist even this is dwindling away. It is no wonder that the druggist feels some resentment at the encroachments on this last scientific bulwark.

Some pessimistically claim that the dispensing doctor made all the trouble. But he didn't happen. He came because the time was ripe and his coming was Progress. The old clock ticks on and you cannot stop it. It's part of the law of evolution, of adaption to conditions, of environment. The dispensing doctor followed the introduction of the more convenient, palatable, portable and effective therapy. He came in with the tablet, the tablet triturate and the granule—with concentrated medication of all kinds. Dispensing is growing in popularity because, with the more modern medicaments, the efficiency of the doctor has been increased by it—a fact which both doctor and patient have been quick to grasp.

The car of Progress is a Juggernaut. Those who stand in its way are sacrificed. Many a retail druggist has failed because he has not learned to adapt himself to the changing order. Bitter competition has not made his position an easy one, and circumstances have forced him into many lines of business more or less remote from the preparation and vending of drugs.

There is no question that a bitter fight is being made by the leaders of the drug

trade and their more intimate commercial and professional associates to stay the tide toward dispensing. Along one line this is being done by a concerted effort to force the Pharmacopeial and National Formulary preparations into the foreground. These are being lauded to the skies as the highest achievements of the pharmacist's art, and physicians are being constantly urged, even almost ordered, to prescribe these and nothing else. They have been given official and semi-official recognition in state and national legislation, and to considerable extent have been set up as standards. In every way possible they have been forced into the limelight. And yet it is a perfectly well-known fact that these preparations do not represent the forefront of pharmaceutic achievement, but, rather, the rear guard.

The last edition of the *U. S. P.* is already old, and there is talk of the necessity for a supplement. What will it be when ten years older? Moreover, a very large percentage of the boasted products contained in these two books are old proprietaries and patent medicine masquerading under other names. By what alchemy does their admission to these volumes purge them from the contempt and contumely with which they have heretofore been loaded by those of the "unco guid" who now see in them but the quintessence of purity and perfection?

In a recent letter from one of the ablest pharmaceutic chemists in this country, he wittily points out the exact status of the U. S. Pharmacopeia, in the following words:

"I have not before me the call issued for the revision committee, but as I remember it, it stated, the U. S. P. having received official sanction in the Food Act, they found it necessary to revise the latest edition and that within a few months after it became official. This shows that the revision committee does not consider it as a standard authority and now wants to make it standard. Whether this revision will be recognized by the courts is an open question.

"Personally I do not consider the U. S. P. anything more than the cook-book of pharmacy. I believe that if a convention of cooks were held and they got out their official 'cook-book' and then had sufficient political pull, they could insist on every restaurant using the same, and on having the same recognized by the federal authorities as the U. S. C. B. ('cook-book') for the judging of all prepared foodstuffs. You can make the similarity closer by requiring all cooks to be graduates of a recognized cooking school and passing a state examination to become registered cooks. I will take a little stock in a corporation you may organize to get out a Cookacopeia; if sold to every cook once in ten years at $2.50 a copy it would pay as well as the consulting work I do now. This suggestion is given free, only asking to let me in on the ground floor."

The latest method of fighting the habit of dispensing on the part of physicians is the legislative cure-all. The *Western Druggist* would make it unlawful for the doctor to dispense. Its arguments are ingenious and specious—and class legislation of the brashest kind. It is assumed that the druggist will stand between the errors of the doctor and his patient; that many deaths are the result of carelessness and ignorance on the part of the doctor. It is not explained who is to stand, between druggist and layman and check up the druggist's errors of dispensing or counter prescribing; nor why the dispensing druggist is any less likely to make mistakes than the dispensing doctor. Nor is it explained why the druggist should be considered more competent to judge of pharmacologic action and therapeutic effect than the doctor, whose business it is to know these things, and who must bear the burden of responsibility for results.

To the druggist the whole range of remedial medication is a closed book. Even the doses of medicine appeared for the first time in the last edition of the Pharmacopeia, and most unscientific they are. Does this fact give the druggist the right to censorize the doctor's prescription? Why, the entire proposition would be an absurdity if it were not proposed so seriously. And

yet, our profession should be alive to the possibility of just such encroachments as these. We would like to know just what methods our national and state organizations propose to take to meet legislation of this character, for that it will be introduced there is little doubt? Do the societies and their officers stand with their members, the *bulk* of its members, or with pharmacy and against them? We shall see.

Still another method of fighting the dispensing doctor is for the druggist to himself treat patients and supply them with medicines over the counter. The extent of this practice, with various other abuses which have grown up about the drug trade, all of which have been discussed by our contributors, have been a constant source of bad feeling between the two professions. We have not heard from those who suggest suppressing the dispensing doctor by the strong arm of the law any hint that they propose to abolish the counter-prescribing druggist, or even to lend their moral support to any movement tending to diminish the frequency or abate the well-known evils and dangers of this practice.

It would be well for everyone to recognize the fact—for it is a fact—that dispensing has come to stay. It has such manifest advantages to the physician that a large percentage of those who investigate it promptly become converts. It is in line with modern ideas and the man who wants to stay with the procession, to secure the maximum of results as well as retain his hold upon his clientele, is *compelled* to take cognizance of it. Read, for instance, the articles on this subject which are printed in other columns of this issue and you will understand why.

Whether the doctor dispenses or prescribes there is no reason why he should not be on friendly terms with the druggist. He should and he will find much occasion for his services. Even the man who dispenses "exclusively" has frequent resort to the pharmacist, not only for the preparation of many things which he cannot conveniently carry or prepare himself, but where the pharmacist's special knowledge and superior skill especially come into play. If each man would lay aside his preconceived ideas and prejudices both would find many places where they could meet on common ground to mutual advantage. But for either to attempt to legislate the other out of business will not add to the cordialty, already a little strained.

We shall not undertake to tell the druggist how to run his business. But the doctor should and must be his own master. Let no man or coterie of men direct you in matters of main importance to yourself. Look this question squarely in the face and be not moved by misrepresentation, abuse, or misleading arguments—even by the threat of legislation directed specifically against your unquestionable rights. If you conclude that it is better for you to write prescriptions, all right—you're the doctor! But if after weighing every phase of the matter you conclude to dispense, as we think you will, stand by your convictions like a man, and let others know how you stand. Be not ashamed; neither be afraid, but keep your eyes open—wide open to your own best good.

The physician gives up to humanity his best: Youth, strength, health, his thoughts and feelings. Then he is paid for his devotion. Is there another calling so noble?—Robert Gersuny.

THE CONSUMPTIVE IN LITERATURE

My good friend suggests that there is room for a scholarly and edifying essay on the consumptive and the large place he fills in literature. It is not always an agreeable portraiture we get, in fact we make it a rule to cut out the Traviatas and Adriennes, the Corinnes, and the whole tribe of diers, as we do the Duchess of Malfi, La Tosca and Francesca da Rimini from our dramatic indulgences. We see enough of these things in real life and are glad to get away from them when we indulge in a night off at the opera or play.

But there is another and more congenial side to this matter. one that aptly illustrates the true Anglo-Saxon manner of taking troubles. At an Arizona resort the "lungers"

were accustomed to loaf at the undertaker's, where they assembled at noon and each deposited a dollar in a hat, all took their temperatures and the highest took the "pot." Why, it's simply epic! Men who can thus "singe the whiskers of death" are the true breed. Let this gallant type of brave men and women be depicted in the romances instead of the sickly sentimentalists, who die more from lack of nerve than from physical disease. Why should not men go forth as blithely and bravely to fight the monster, Disease, as they do to "face the cannon's mouth" on the battlefield?

Die? Why, haven't we all to die sometime? Do we ask Destiny for mortal immortality? What is our best work but postponing for a time a death that is inevitable in the end? Let us realize this, and conscious that whether it be today or some tomorrow more or less removed matters in fact very little. Most of us place far more importance on the continuation of our conscious life here than it really merits. Since die we must, it behooves us to well utilize the today we can control, fill it to the uttermost with useful work and happiness; and, let the end come as it may, be ready for it. Don't poison the day we have with senseless terrors at a fate we cannot shun in any event, and that will come all the sooner for our fears.

"Eat, drink and be merry for tomorrow ye die." Just as well go out of the world singing and happy as pulling a long face over it. If you live as you should, your frame of mind at death will hardly matter much; and if you are not living right, better reform now while the shadow of the tomb does not overhang you.

A woman was dying of consumption. She was reduced to the last degree of emaciation; the vital spark flickered and her spirit quivered for its approaching flight, and the friends awaited the last breath. Her faithful physician, reading some evidences of thoracic suffering in her attitude, applied to her chest a sinapism. Her countenance assumed a look that showed she desired to say something. Bending over her the attendant heard with her last breath these affecting words: "A good deal of mustard, Doctor, for so little meat!"

Smile, once in a while,
'Twill make your heart seem lighter;
Smile, once in a while,
'Twill make your pathway brighter;
Life's a mirror, if we smile
Smiles come back to greet us;
If we're frowning all the while,
Frowns forever meet us.

—Nixon Waterman

PROSPERITY AND THE DOCTOR

According to W. E. Curtis the United States has from 1900 to 1904 increased its possessions from $88,517,306,775 to $107,104,211,917; a gain of $18,586,905,142. Well may Lipton say that the United States presents the most remarkable and astonishing general prosperity the world has ever witnessed. It is not the great trusts alone, not the protected manufacturers, but the entire people are simply wallowing in a wealth that marks a new era.

The distribution of this increase is of interest. In four states it amounts to over 30 per cent of the total valuation in 1900, namely in North Dakota, Oklahoma, Washington and Oregon. Next to these agricultural commonwealths comes the great mining state, Colorado, with Minnesota and Arkansas. Surely mining cannot be such an utter financial failure. Even with her great coal and iron mines Pennsylvania does not come near this percentage of increase.

What is it that has made this country so prosperous? The industrial development especially. And what has made this so tremendous, if not the business ability and enterprise of our mercantile classes? The following editorial item from the *Chicago Record-Herald* is worth pondering over: "An English merchant visited the United States to gather American ideas to infuse into his business. Looking at an adding machine he was asked if he used one. He replied in the negative, although it was invented twenty years

ago. Asked why, he responded: "I suppose it is because the manufacturer never tried to sell us one."

Consider the improvements in every department of human activity—the improvements in machinery, in methods, in products, and all because somebody has had something he wanted to sell. The benefactors of the race are the men who invent, who make, who introduce, who sell, who devise better things and bring these to the knowledge of those who can use the better things. Is it then disgraceful, intrinsically so, to sell goods? As applied to the purveying of supplies for the medical profession this stigma is simply a relic of the dark ages, a medieval prejudice. To prepare and purvey to the physician a better means of relieving human suffering and prolonging human life is as praiseworthy at least as to make and sell a machine capable of turning out a dollar article at a cost of a dime less than it previously cost. Or even the service to humanity of the genius who invents a new puzzle game may dim before the man who devises a safer anesthetic.

What folly. The man who prides himself on the fact that he doesn't sell anything has mighty little to be proud of. The man who has really made an improvement in our means and sells his product, need not feel very inferior to the other man.

The despicable one is he who slinks, seeking to make money out of his ideas and not let it be known. Hypocrisy is despicable; merchandising is reputable if carried on reputably.

Nevertheless, this stupid, mossgrown prejudice is partly responsible for the backwardness of the medical profession as compared with the rest of humanity. It has fettered the limbs of the worker, and turned the active brains into other pursuits. There has been no premium but an incubus resting over the head of him who is dissatisfied with his means and devises better. At the least he is ostracised if he dares to seek that renumeration that would be his in any other walk of life, and he leaves the profession or sits down in idleness.

Nothing is unprofessional that is honest, that is intended to make mankind or any part of it really happier, better, and rightly more prosperous. To the dogs with class fences that curtail the rights of man (of the doctor) in his desire to expand, to do, to rise, even to get his rightful share of this prosperity of ours that is the wonder of the world today.

The good in the world makes one doubt of the devil; and the bad in it, of God. This is the World Riddle. —E. M. Epstein.

ANTIVACCINATION

The St. Louis *Medical Review* has occupied a number of recent issues with a discussion of Elbert Hubbard's attack on vaccination. So far as the argument is concerned, the *Review* does not leave so much as a grease-spot of the *Philistine*.

We have however, been exceedingly skeptical as to the value of such discussions. The subject has been completely worked out. No man who has studied vaccination impartially and examined the evidence with discrimination can have any but one opinion upon it. Hence to such men further discussion is useless. The antivaccinator we have long since learned to look upon as a man who will not see and tell the truth, nor will he listen to argument, consequently any effort upon him is wasted. The only way to deal with such a man is to let him alone, and if he wants himself and children to die of smallpox, leave him that not very desirable privilege.

An instance occurred in the writer's observation: An antivaccinator in Philadelphia was stripped of his entire family by smallpox. This did not, however, cure him. He married again, and raised another family. In due time a succeeding epidemic swept away that family also, the vaccinated neighbors being in both cases impervious to the disease. It is needless to add that this repeated demonstration, brought home to him in such a manner, failed to convince him of the efficacy of vaccination.

But this view must be modified when a man of the prominence of A. C. Bernays speaks of the efficacy and usefulness of vaccination as not having been "scientifically established." This vindicates Dr. Millican's judgment in giving space to the matter, and further it illustrates the fact that no ordinary scientific fact is ever thoroughly and completely proven so that it may be allowed to rest. We are not sure, in fact, that such primary truths as that two and two make four would not be forgotten if the multiplication table were dropped from our school books.

I am in earnest. I will not equivocate. I will not excuse. I will not retreat a single inch, and I will be heard.—William Lloyd Garrison.

ARTERIOSCLEROSIS

That the vasomotor conditions presented in practice are not recognized by many physicians is shown by the following case: It may also demonstrate the correctness of our contention, that we are woefully deficient in the habit of correct clinical observation, and all too ignorant and unskilful in therapeutic applications.

A man seventy-two years of age, with advanced arteriosclerosis, was dying. He lay in coma, respiration stertorous, the urine almost totally suppressed, the pulse one hundred and thirty and contracted to a whip-cord.

For this condition, and but four hours before death, a physician in consultation prescribed a mixture containing potassium acetate, cactus, strophanthus and sparteine. Let us analyze this prescription: The condition was palpally one of imminent peril from toxemia, this being due to the suppression of urine, and this to the extraordinary vascular tension which almost completely shut off the flow of blood through the renal arteries. Under these conditions, all the possible effect from potash was an increase in the toxemia, while each of the other ingredients tended in some degree to increase the already excessive tension. There was no such cardiac debility manifest as would imperatively necessitate heart-tonics regardless of the excessive tension.

The imperative indication (*his only chance*) was for relaxation of the tension, with quick and powerful elimination. This could have been met by the hypodermic injection of veratrine, and by throwing into the bowel half a pint of cold saturated solution of table salt. In the absence of these, pilocarpine should have been injected hypodermically, an effective but perilous remedy. It may be objected that all these remedies would have been perilous to a dying man; but in fact there was really no choice—he must be relieved thus or be abandoned to certain death, and he died.

To us there seems to be no possible question in this case. The indications were as positive as the multiplication table. Physicians may differ as to the selection of the best remedies to relax tension and secure quick elimination; but the duty of meeting these two indications in this case was absolute and unquestionable. There is little enough in applied therapeutics that is absolute, and to that little we must cling tenaciously as we look for more—as we find more in positive remedies definitely applied.

EXPERIMENTS: MAKE SOME!

There are experiments which are justifiable, however much we may object to that miserable therapeutic method that consists in aimlessly "trying things," one after the other, without any accurate knowledge of the results to be expected. But the testing of new remedies is another matter.

Every number of this journal contains references to new medicines, or suggests new uses for old ones. We are constantly endeavoring to fix more precisely the physiologic action of drugs, and when the need for such action arises the physician can legitimately make use of these drugs and test the correctness of our conclusions.

In fact, it is only in this way that a man grows in therapeutics. Beware of allowing

old age to supervene; and the surest indication of its presence is crystallization of the mental faculties. When a man ceases to grow mentally, he begins to deteriorate mentally. When a doctor ceases to improve his therapeutics, his therapeutics begins to become obsolete and he to become a back number. No matter if you consider your therapeutics good enough, it is not good enough if there is any better.

Experimentation at the present day, however, is a very different matter from what it used to be. Take, for example, solanine, which is offered as a substitute for bromides This agent is not advised simply "because somebody gave it and the patient happened to get well." The most careful scientific investigation showed a close similarity in the effects produced by the two agents, with three important advantages pertaining to solanine. He who tries the latter, therefore, is fully justified in doing so. In fact, he is really not justified in neglecting to try it.

Berberine has been shown to possess the specific power of contracting relaxed connective tissue. Hydrastine contracts the capillaries and the smallest arterioles, exactly what digitonin relaxes. These are a few of the principles every practising physician should have on hand, to apply when he sees the need for their action in his cases. This is, however, a very different matter from copying into a note book a prescription, which somebody has said was "good for measles."

There is another active principle we have long wished to place before our readers, but have been deterred by its great cost. This is pellotine, an alkaloid from Anhalonium Lewinii, the mescal button. This principle is said to possess properties resembling those produced by cannabis indica in works of fiction, but which no civilized man ever obtained from it. Pellotine might prove of inestimable value, and is worth trying out. It would cost at least two hundred and fifty dollars to secure a supply sufficient for decisive trials. If two hundred and fifty physicians feel sufficient interest in the matter to write to us that they will take a dollar's worth for trial, we will secure the pellotine and send it to them, with a full account of the observations made upon it already.

Courtesy and composure are mighty weapons in life; they make us superior to our opponents when they storm upon us.—Robert Gersuny.

PULMONARY VASOMOTER CONDITIONS

In several articles we have referred to the fact that the various vasomoter remedies may possibly exert a selective action on various portions of the circulatory tract, as hydrastinine is believed to do upon the genitourinary system. This impression is strengthened by the observation that the hemostatics, like ergotin and digitalin, act most powerfully on the splanchnic circulatory area, and least if at all on the pulmonary or lesser circulation. Late observations show that this is probably explicable by the presence of nonstriated muscular fiber in abundance in the splanchnic area and its comparative scarcity in the pulmonary tract, as well as in the cerebral vessels.

Accepting this as correct, we see that we could scarcely hope for a direct astringent to the pulmonary vessels and those of the brain, and that our best means of deriving blood from these tracts is by relaxing the tension of the general circulation, whereby we permit the blood to flow into the viscera and the muscles, relieving the engorgement of brain and lung. This points to veratrine and aconitine, or gelseminine, as the remedies for such conditions as are characterized by an excess of blood in these areas or by hemorrhage in or from them.

But here we meet a new and most important observation: The members of the nitrite group, glonoin representing it, not only relax the systemic vascular tension but directly and powerfully contract the pulmonary capillaries, the lung tissue actually whitening under its influence. Should this be confirmed we have a new reason for employing glonoin in pulmonary hyperemias. As for hemorrhages we have long since learned to prefer atropine to the or-

dinary hemostatics, the former powerfully directing the blood to the skin and thus relieving the internal fluxion. But as we have heretofore combined with this agent glonoin to secure quicker action, we must now advise it to get its own direct effect, prolonged and supported by that of atropine.

OUR IDEAL

Is it an impossible ideal that we have formed, that physicians will cease "trying things," will quit giving prescriptions of many ingredients only because some other physician has advised them, and begin applying to evident pathologic disorders remedies whose powers to restore normal conditions in just such cases are known? God forbid.

We fully believe that a long start has been made in this matter of accurate prescribing. We believe that it must commence with the use of remedies which possess just such exact and well defined powers, and do not admit of uncertainty or antagonism in the effects resulting from their use. We believe the American physician is a good enough diagnostician to perceive certain departures from the healthy standard as he looks his patient over, and that when he has in his hands a remedy that he knows will dissipate the disease and restore health, he knows enough to give of that remedy exactly enough to do the work, and when to stop it.

We find that in ninety per cent of cases that come to us the every-day family doctor can do this without aid; and that in most of the rest he can do the work with a little assistance from his books or his colleagues. The really mysterious cases that defy us to diagnose are very few. While the study of the finer shades of pathologic modifications reveals opportunities for corresponding nicety in the application of remedies, and thus compels us to study and use many remedies, nine-tenths of our work may be done with twenty drugs, the others being rarely called for.

We have to learn the uses and indications for a score of active principles and other definite remedies, and we have to keep studying the human body and its maladies as long as we live. A few well-mastered pathologic principles, the recognition of a few very frequently presenting conditions and a knowledge of the exact effects following the administration of a few remedial agents, and enough has been acquired for a start.

The hurry of the times affects us so
In this swift rushing hour, we crowd, and press,
And thrust each other backward as we go,
And do not pause to lay sufficient stress
Upon that good, strong, true word, "earnestness."
In our impetuous haste, could we but know
Its full, deep meaning, its vast import, oh!
Then might we grasp the secret of success.
—Ella Wheeler Wilcox

REAL WISDOM

Benjamin Franklin was emphatically the wise man of his day, and with succeeding years his reputation has grown rather than the contrary. One saying of his we note in a current periodical, which is well worth reproduction here. Indeed it might well be taken as a text for the life of the practising physician.

"Let no pleasure tempt thee, no profit allure thee, no ambition corrupt thee, no example sway thee, no persuasion move thee to do anything which thou knowest to be evil; so shalt thou always live jollily, for a good conscience is a continual Christmas."

Every word of it applies to the medical practician as it does to no other human living being. No other man comes as near to living up to its noble ideal; no one else makes such sacrifices of personal comfort, of home pleasures, of health, and too often of life itself, in the discharge of duties which are unfortunately apt to be little regarded by the recipients.

But the active work of our profession is only a part after all of the sacrifices made by the physician. When he is fortunate enough to get a little ahead of his expenses, instead of investing his surplus in such a manner as to bring him an income outside of his daily work, he generally makes his

investment in the means of doing better work for his patients. Whole libraries of new works are published every year, each one implying some improvement on all preceding publications. New and improved apparatus is constantly being devised; new methods of treatment are continually being elaborated; new and better lines of medical preparations presented. It is impossible for a man to keep up in all these lines, and we are far from saying that every new thing is worthy even of a trial. Much discrimination should be exercised, or else the doctor's practice will degenerate into a continual experimenting with new things, while old, well-tried ones are forgotten. This is especially the case as to drugs. The newer "physiologic" therapeutics not long since threatened to push drug therapy into oblivion.

A reaction, however, has taken place, and the good sense of the profession is reasserting itself. Nine-tenths of our work is better done by the aid of drugs than by all the rest of the indirect therapeutics put together. It is principally by bettering ourselves, by increasing our knowledge of drug action and our skill in drug application that we can make of ourselves better doctors.

As a matter of fact, a man's first duty is to mind his own business.—George H. Lorimer.

WHATEVER YOU DO—DO IT WELL

The demands of the time are for men who can do things. Men who can do any one thing better than others can do it, are the men who find places in the social system. We once saw a man whose one and only accomplishment was to dance a jig on his crutch, he having had one limb amputated at the thigh; and that one accomplishment was what stood between him and his family and starvation.

Queer, however, that men are so long ascertaining what their one best "holt" is. A prominent naval officer—he must be an Admiral now—was a born slight-of-hand performer, and could vary the most tedious official function by extracting packs of cards from your collar, rabbits from the captain's cocked hat, etc.

"Act well your part." No matter how great may be your abilities you can only fill a niche, and the vast possibility is that it is a very small niche indeed. But, fill it, full and well.

THE ETHICS OF MANUFACTURING

Under the above title the *Medical Record* discusses some of the ethical questions that have been agitating the medical mind of late. The writer thinks that with some exceptions the discussion has heen reasonable and sound, and the agreement has been reached that physicians are within their rights in seeking to know the ingredients and their relative proportions contained in all compound remedies offered as aids in the treatment of disease. Details of the methods of compounding are not essential.

"As yet, we regret to say, the agitation has not had the desired effect, since inquiry among pharmacists shows that physicians continue to prescribe the secret remedies in spite of the anathemas of the violent and the arguments of the reasonable;" probably because the remedies have proved useful. "It will take time to bring the mass of the profession, as well as the manufacturers, to view this matter in the proper light, and the more soberly the subject is discussed and the less vituperation is used in place of argument, the sooner the looked-for reform will be effected."

The *Record* does not look upon the manufacture of "dope for quackery" as a matter for our condemnation; but very sensibly adds: "But if we must insist upon a certificate of church-membership from our shoemakers and drug manufacturers, since the Council on Pharmacy of the American Medical Association has undertaken to determine the ethics of proprietary remedies in general, the question of the moral character of the manufacturers of these preparations would seem to be one

equally within the scope of its investigation."

Surely. It is one of the inevitable consequences of any active movement that it does not stop just where its inaugurators may have intended. You can not reform a man or a corporation in part. One reform necessitates another; and a movement intended to strike certain abuses or abusers can not be limited to the original objects without justifying the charge of favoritism. Already people are beginning to ask if the listing of proprietaries in the Unofficial Pharmacopeia is to stop with the imported synthetics and a few products of a few native houses. The demand for fair treatment is one that can not be disregarded without discrediting the reformers. The tendency to make flesh of one and fowl of another is too nearly universal for them to stop short when an obvious and unavoidable extension of the work will result in injury to the interests that have been favored by earlier operations.

With all due respect to our esteemed "elder brother" in the journalistic fold we must say that we think his reasoning in this matter very bad and his ethics a good deal worse. This patent-medicine "dope" is either harmful and dangerous to the public health, or all our crusade against it is a sham, and a travesty on right and justice. If the stuff itself is as bad as we have painted it then every man, every firm, every agency which contributes to its manufacture and sale becomes a participant in the wrong. Attempts to evade this responsibility are mere casuistry. The same arguments would stamp the business of the distiller and the brewer with the trademarks of morality and respectability; would excuse the man who knowingly rented his house to a public bawd; or let his "hotel," like some of our Chicago "respectables," to be used as an open house of assignation; would justify the "profession" of the procuress and the pimp, who while keeping modestly in the background pander to the appetites and vices of the weak.

Pah! Brother Stedman, this isn't worthy of you!

And just as a mere incident in this argument, how does it appear to the doctor, or for that matter to any man who believes in fair play, when the man who openly claims to be your best friend (and making his fortune thereby) turns out to be secretly aiding and abetting your enemies?

I have gout, asthma, and seven other maladies, but am otherwise very happy.—Sydney Smith.

BUTLER—OPTIMIST: WORDS OF CHEER

Professor George F. Butler is well known as one of the first teachers of therapeutics in this country, and as the author of one of our best textbooks on that branch. Despite the modesty with which he speaks of it, his book is a favorite with practicians and students, and we have ourselves drawn from it many a valuable item for our own work. That such a man is willing to publicly endorse this active-principle movement is a phenomenon that deserves attention.

Without the least seeking to detract from the fine manliness of the first great therapeutist who has the nerve to come out openly, as Butler has done, the fact is becoming evident that the opposition to active-principle therapeutics is evaporating. The vindictiveness has gone, the contemptuous slurs have subsided, even argument has ceased; and save an occasional growl and a few feeble protests and demands for further evidence, there is—silence. Under this silence medical belief is shifting to a new plane. Accommodations to the new order are being arranged, men are accustoming themselves to think and practise along new lines, and about all that is left is the frank, public acknowledgment of the change. Somebody has to be first, and the foremost man in Western therapeutics courageously accepts the duty.

By reference to his letter (see page 444) it will be seen that what has impressed him is the robust optimism displayed by the active-principle advocates. This optimism

is itself a phenomenon, that deserves consideration. It has its causes like all phenomena. That the man who occupies the front in this movement is by nature optimistic is little to the purpose, for the most pronounced tendencies in this direction could scarcely endure through all these years of discouragement and sacrifice, were it not that in the movement itself existed the fuel to sustain such a steady and persistent blaze.

Not only is Dr. Abbott optimistic, but everybody engaged in the movement is possessed by a similar spirit; and each new physician who experiments with and masters the alkaloidal means and methods becomes in turn an optimist. The fact becomes impressed upon the student of active-principle affairs that it is the method itself that begets optimism. Familiarity with therapeutic certainties is followed by a growing sense of power, that completely alters the viewpoint of the practician.

We have said these things before. We are glad to note that their significance is being realized.

A CURE FOR THE "ITCH"

Applications of sulphur cure itch, as do applications of any other germicide if of sufficient strength, and if used with sufficient persistence. As every one knows, it is necessary also to subject the patient's clothing to disinfection as well as his body. The applications are exceedingly unpleasant and disastrous to the clothing, besides making the patient uncomfortable and obnoxious. If, therefore, any remedy can be given internally which will accomplish the same object, it is most assuredly desirable that this should be done.

Saturate the patient with calcium sulphide, giving 1-6 to 1 gr. every two hours until the perspiration smells of the drug. We have never tried this ourselves, but it is our firm conviction that the itch insect will not be able to bear the atmosphere of sulphur with which he would be surrounded, and that the method will prove more effectual than any external application, without the disagreeable attendants on the latter. If any of our readers see fit to put this suggestion to trial, we will be pleased to hear of the results.

There is no joy in life equal to the joy of putting salt on the tail of an idea.— Elbert Hubbard.

MEDICAL MEN AS COIN COLLECTORS

We learn from the London *Lancet* that an English physician, Dr. F. Parkes Weber, has presented to the British Museum his splendid collection of coins, consisting of 5,551 pieces, many of them very rare.

Many American physicians are making heroic efforts to collect coin, but with sadly unfortunate success in the vast majority of cases. And very ordinary kinds of coin would suit the majority of us. Nevertheless, we congratulate Dr. Weber and the British Museum.

DIGITALIN VS. STROPHANTHIN

In the *Medical Record*, for Nov. 10, is recorded an instructive discussion at the N. Y. Academy of Medicine on the heart tonics. The paper was by Dr. Hatcher. He preferred strophanthin to digitalis as the former does not cause contraction of the coronary arteries. Digitoxin accumulates and is insoluble in water. Digitalin in large doses is rapidly excreted by the kidneys. Experimenting with tincture of strophanthus he found that results were evident in ten to fifteen minutes after injecting it in frogs. The highest doses used caused death in 29 minutes. He obtained fairly uniform effects from the tinctures procured from retail pharmacies.

Wallace declared that the same variability was found in American tinctures as in the German, and in the latter one specimen proved to be 200 times stronger than another. Digitoxin constricts all the vessels of the body, strophanthin only the mesenteric vessels. Digitalis is better for arterial engorgement, but for pulmonary obstruction, with dilated right heart, it is not advantageous. Digitalis given by the

mouth shows no effect for twenty-four hours; strophanthus does evident good within three hours. Good digitalin produces its effects in half an hour and its maximum in an hour, and is the best agent in heart failure.

Libman said that Fraenkel had advised strophanthin internally in heart failure. In a moderate hemorrhage in typhoid strophanthin was given hypodermically, and eight minutes later the patient sat up, complained of heart constriction and died. Strophanthin hypodermically is twelve times stronger than by the stomach, and intravenously seventeen times stronger.

Loomis said strophanthus was one of the most unreliable drugs we had; and often inert. In children under twelve with heart disease it gave good results—better than in adults. Of the samples examined by the Board of Health about 60 per cent was inert.

Berg only used strophanthus when digitalis had been exhausted, giving each alone.

Janeway said that on going on duty at St. Luke's he found there had been no improvement in the heart cases, that had long been on digitalis, strophanthus, etc. Obtaining some good English leaves, *within forty-eight hours after commencing it the effect was manifest!* [This is one of the strongest evidences we have ever had, of the practical ignorance of practicians as to dosage to effect. Here was one of the greatest hospitals in the United States, with the most illustrious clinicians of New York City; and they had not paid sufficient attention to their cases to see that their doses were insufficient to get the specific effects of the drugs. In the face of this, can you say that we are wrong in our contention that the difficulty with the drug therapeutics of our leaders is not the lack of beneficial powers in the drugs but the lack of clinical skill in observation by the doctor?] In closing Hatcher remarked that the strength of digitalis prepared in July varied by 400 per cent from that prepared in September.

Such things are not possible with the physician who administers digitalin or strophanthin in minimal doses every half hour till effect, and then to sustain effect. Really, gentlemen, the work of these active principle men may be worth investigating!

In Heaven there are no kickers. In Hell there is none else. That is the difference between Heaven and Hell.—Elbert Hubbard.

TO GET THERE—PUSH!

Once upon a time—for that's the way all stories begin—a boy from the country came into the great city to make his fortune. He was an ambitious boy and had set his mark high, therefore he made up his mind to look for work where the opportunity was greatest. This determination led him to the door of a great mercantile establishment. He marched boldly by the understrappers at the door; by the crowd of clerks, some of them grown gray in the service of the House; by the department chiefs—for he was determined to go to the Boss himself, to get work as near the top as he could.

He put on a bold front and went straight ahead, as if he had special business of weighty importance which would bear no interruption—as he had—and finally came to the door of the Great Man. The confidential clerk in the anteroom he never even glanced at, but on he walked, right into that holy of holies, the private office of the President of the Firm.

The Great Man looked up and frowned—astonished that the Important Affairs which are supposed to absorb all the time during the office hours of every Merchant Prince had been invaded by a mere nobody—a country lad.

"What do you want, my boy?"

"A job."

"But why didn't you put your application on file in the regular order?"

"Because I want work today!"

The Great Man was interested. This boy somehow was different from others. There was a confident air about him. He looked you straight in the eyes and his jaws were square and firmly set. But

he was a poorly dressed, unpolished country boy after all. But—a test—

"What's your motto, boy? Have you one?"

"Yes. Same as yours."

"Same as mine? Where did you see mine?"

"On the front door. It's 'Push.'"

He got the job and is now manager himself.

That's only a story about a boy; but it's true and there's stuff in it worth while for any man—any doctor—to think over. The world takes every one of us at his own estimate. Inherently there isn't so much difference between us, except as each one creates that difference by the quality of his ideals and the determination with which he builds them into material, tangible facts. Hard work and high character are indispensable factors in the building of success, but the electric fluid which sets all the machinery to buzzing, without which the finest kind of raw material will rot away forgotten in a corner, is—Push!

Put some of it into your practice, my good brother. Be afraid to look no man in the face!—no matter what label an undiscriminating and hero-worshiping World may have attached. Elbow your way into the crowd. If you have ideas spit 'em out! Get a hearing!

Every man will be better for it if he can get "just a taste" of Success in his mouth, and learns to appreciate his own inherent greatness. There's some of it in every one of *you*. Therefore—LET'S ALL PUSH!

It is strange that not to know a thing we have to study it for years or a life time; but just to know it a very short period will suffice.—E. M. Epstein.

ANGINA PECTORIS

In *The Medical Record* for October 20, Francis Hare contributes a paper on the Mechanism and Treatment of Angina Pectoris. He tells us that vasoconstriction in one part is constantly compensated by vasodilation in another, the uniformity of general blood-pressure being secured at the expense of uniformity of local pressure. Many examples of physiologic compensation might be given. It is also a common and important factor in the domain of pathology. Pain will be occasioned if the congested part is supplied with nerves and expansion is hindered. If the latter element is absent, there will be swelling.

In migraine and asthma he believes vascular distention is present in the cerebral membranes, or in the bronchial. These two maladies have strong affinities with angina pectoris. The three are prone to alternate in the family and the individual. In all there is peripheral vasoconstriction with small pulse and cold skin, and consequently vascular distention elsewhere. In angina the pain depends upon vascular distention in the mediastinum. Swelling is impossible in the tightly packed heart-muscle, hence the pain.

The four factors in the distention are, local vasodilation, peripheral vasoconstriction, left ventricle action, and the condition of the mitral valve. The vasodilation affects the coronary arteries, and the internal strain is the cause of atheroma. General vasoconstriction causes the cardiac congestion and may be due to cold. Digitalis sometimes induces it, as does emotion. Blood-pressure rises an hour after meals. The arteries are also congested during menstruation, and angina is very frequent at that time, as are asthma and migraine.

Anything increasing the work of the left ventricle reduces distention, and *vice versa*. Reduction occurs in syncope, being secondary to peripheral vasoconstriction, syncope and angina representing alternative modes of compensation. The relief of angina by an emetic is due to the relaxation of vasoconstriction also. Oliver has shown that anginous patients are permanently relieved by cardiac dilation and failure. Hare says this is also true of asthma. The same is true of a mitral leak, which effectually prevents distention along the aorta and its branches.

His conclusion is that angina, like migraine and asthma, may be classed among the vasomotor neuroses. Under this view the organic disease of the heart and vessels

is an effect and not a cause of the angina; and this view is sustained by Fagge's observation, that the long duration of angina in some cases seems inconsistent with the idea that any organic lesion could have existed throughout the course.

His treatment of the paroxysm consists in amyl nitrite inhalations, morphine hypodermatically, or chloroform; in the absence of which hot drinks and heat to the skin generally give relief. Preventive treatment looks to the prevention of peripheral vasoconstriction. Of late there is an increasing tendency to look for its cause to the composition of the blood. In malaria there is no doubt but that this is true. Hare thinks one of the commonest factors is hyperpyremia, where the blood contains an excess of carbonaceous fuel, and this view has been accepted by Chittenden. In addition we must consider the varying response of the vasomotors to this hyperpyremia. Acting on the humoral factor Haig urged a purin-free diet, and this is of value if the proportion of purin-free proteid is also reduced. Hare, however, pays no attention to the purins, but cuts down the saccharine carbohydrates and fats. This plan is quite successful, especially with the well-nourished and obese. Carefully graduated exercise and other means of overcoming peripheral dilation are necessary. If the paroxysms of angina, however, still continue, Hare advises cauterizing the healthy septum nasi, as Francis has done in asthma. He quotes Robertson's application of this method in thirteen cases, with rapid improvement in all. Finally he alludes to the wholly empiric use of potassium iodide as frequently beneficial.

This paper is exceedingly interesting to us, in that it takes the same view of the importance of vasomotor conditions, and the existence of invariable compensation, which has been taken by the writer in numerous papers. We would especially cite two papers in the *Medical Record*, one appearing January 6, 1906, entitled "Selective Absorption by the Cell," and the other appearing in June, in which these principles were applied to the treatment of pneumonia. Dr. Hare has not gone into the application of remedies sufficiently to have recognized the fact that medicinal agents may be applied to both conditions at the same time. At the present time the writer has a paper listed for publication, in which he advances the vasomotor theory of explaining certain forms of asthma. In this, as may be seen from Dr. Hare's paper, he has been anticipated. However, there is more satisfaction in knowing that the conclusions at which he arrived from clinical studies exclusively, had already been reached by Weber, Sir Andrew Clarke and Osler, than in establishing any petty personal claim of priority. The main point is that in pathology as in therapeutics the studies of the active-principle users lead to conclusions in harmony with the highest developments of modern science.

The true principle of progress in the healing art is to try all things with an open mind and hold fast to that which is found to be good.—The Practitioner.

KEEP YOUNG: BE A HERETIC

One of the tendencies of advancing age is to circumscribe one's activities,—insensibly to get into ruts—ruts both of thought and of action. Some of these may be desirable ruts, but as a rule, the tendency is a bad one. It interferes with soul-growth—in fact it shows that growth is *done*, that expansion has ceased; that the real man has ossified; that new ideas have become distasteful to him; new things irksome.

Brother, keep young! Have always at hand the newest and most radical of books, the most soul-stirring and progressive. Keep up with the young and growing phases of life. Even though you must wade through some of the ineffable trash mistermed "new thought," it is better to do so than to find yourself getting to be a back number.

Especially in your profession keep up with the thinkers; be as far ahead as the most notorious innovator. Read the radical and heretical publications that, like the *Critic and Guide*, are hammering away at huge blocks of apparent ignorance and misconception, but in reality only rough-

edged with frauds, fakes and follies, out of which are sure to come, sooner or later, though never so deeply hidden, pure statues of truth. It's chisel is sharp, and its mallet not light, but the hand that holds the one holds true while that which wields the other, strong and unyielding as it may be, mercifully reserves the strength not deemed necessary to accomplish essential results. And results count—justify the means.

As Apollo himself is just "a block of marble with the corners knocked off," so the choicest truths are chiselled from the fallacies about them. As the perfectness of the statue depends upon the skill of the artist, so resultant truth depends for its perfectness and value upon the importance of the subject (the quality of the block) and upon the exactness and completeness with which error is chipped away.

Only a good artist, working on a block ever so good, can expect to produce a good thing—one who can see the finish at every stroke.

By the way, I wonder how many of you know that Dr. Robinson has recently launched a new publication, which he has named *Therapeutic Medicine*. It is not only one of the brightest and brainiest journals in the medical field, but it is right up to date, filled with ideas of practical helpfulness that are sure to make it indispensable to every one who becomes a subscriber. Any doctor who fails to subscribe for this journal and to read it regularly is going to miss a whole lot of *awfully* good stuff.

As Dr. Robinson says in his preliminary editorial notice, his effort is to establish a journal "every page of which shall be practically and genuinely helpful to him (the doctor) in the treatment of his patients." Therapeutics in the broadest and most liberal sense, but especially that most neglected part of it, medicinal therapeutics, is the exclusive field, and upon it will be concentrated all its editor's wonderful fire and ceaseless energy.

The subscription price of the journal is $1.50 a year, but why not take advantage of Dr. Robinson's special offer of both *Therapeutic Medicine* and the *Critic and Guide* one year for the price of one—$1.50? Or, better still, send $2.00 and get *Altruria*, his inspiring journal of advanced humanitarian thought, along the line of work "for others." The $2.00 pays for the three journals. Address Dr. Robinson at 12 Mount Morris Park West, New York City.

Unless we are very much mistaken, with the "triplets" Dr. Robinson will make the dry bones rattle. Give him a boost and do it now! I hope every reader of CLINICAL MEDICINE will subscribe for one or more of these journals. Get *Therapeutic Medicine* anyhow.

DON'T FORGET YOUR DEGREE, DOCTOR

One of our troubles—and they are not so few as we wish they were—is that so many of our good doctor friends write us in such a way that we can not for the life of us tell whether they are doctors or not. Inasmuch as we restrict our subscription list and our professional dealings as far as possible to the medical profession, this is sometimes a source of annoyance to our correspondents as well as ourselves, since we invariably write back for further information. This is done to defend the doctor's interests, to keep the journal and our literature out of the hands of laymen—who are only too ready to indulge in self-medication if given any encouragement.

Some of our correspondents have taken offense at these letters of inquiry, though they have been indited in the nicest way we know. We wish we knew personally every doctor in America, but we don't—not even their names. Moreover, when even the name is not in the medical directory we naturally assume that the man is not a doctor, till he shows us the contrary. What else can we do?

The simplest way out of the difficulty, one that would save us lots of correspondence, is for every doctor to sign his name with the "M. D." attached. Furthermore, it would put money in the pocket of every one of you if you would use in your correspondence neatly printed letter-heads and

envelopes, as well as cards, bills and statements. That's the modern, business-like way to do things. Not only will your mail be handled more promptly, your correspondence be more carefully attended to, your name correctly spelled when it appears in print; but your patients will soon catch on to the fact that you are a progressive kind of fellow—a real doctor and proud of it.

Don't be a mossback.

DIGITALIS

Hatcher's paper on digitalis appears in the *J. A. M. A.*, for December 22. There is little in it that has not already been fully discussed in most journals. We may except one statement—that digitoxin does not cause greater vasoconstriction in the splanchnic area than in the periphery. We cannot see how this can be, unless our views as to the action of digitoxin are radically erroneous. If it stimulates the muscular fiber the action must be greatest where there are most muscular fibers. On this ground Dixon bases his condemnation of digitalis as a hemostatic in any but the splanchnic area.

Hatcher enumerates the disadvantages of digitoxin as, insolubility in water, irritating qualities, slowness of action, cumulative tendency, proneness to decomposition, the narrow margin between desirable and undesirable actions, and the very decided vasoconstriction it causes, which may or may not be desirable. He might have added that these are sufficient to justify us in restricting the use of digitoxin to the rare cases wherein the vasoconstriction is the effect we want, and employing the other glucoside, digitalein, for the heart-tonic action, this latter being free from every one of the objections cited and capable of affording all the desired effects of digitalis.

Of strophanthin he says that it is not constrictant of the coronary arteries or the general circulation, but purely heart-tonic; it can be prepared in constant and stable form, is inexpensive, can be administered for long periods without cumulation, and the effective dose lies much further from the cumulative or perilous dose than with digitoxin. It is quite water-soluble and quick to act. Nevertheless, Dixon pronounces it far more toxic on equalized physiologic dosage than digitalis. Hatcher places the action of strophanthin at three hours from administration, as against forty-eight hours for digitoxin, but Fraenkel found the latter required sixty hours, even when given subcutaneously. The use of strophanthus has fallen off by reason of the variable quality of the tinctures. The greatest obstacle to the use of digitalis and its preparations arises from their variability, due to differences in methods of collection and preservation. This leaves the doctor with one foot firmly planted on truth, and the other in the air.

The secret of success in life is for a man to be ready for opportunity when it comes.—Disraeli.

DIONIN

In the *Illinois Medical Bulletin* Hugh Blake Williams discusses dionin from the stand of the eye specialist. He states that it is not an ocular anesthetic but the best ocular analgesic we have; a vasodilator and a powerful lymphagog. He recommends dionin in gonorrheal irodocyclitis with increased tension, posterior synechiæ and intense pain; for indolent trachoma, with leathery granules; pannus; phlyctenulæ (with atropine), and all forms of corneal ulcer; infected wounds; iritis, irodocyclitis, uveitis and hyalitis; intraocular hemorrhages; subacute and chronic glaucomas to reduce tension and relieve pain but not as a cure; to clear up corneal opacities; parenchymatous keratitis; to remove the mydriasis of atropine; for pain and discomfort following over-use of the eyes; and for patients who have a return of eye-strain after having been fitted with glasses.

He does not find this agent useful for ordinary conjunctivitis, retinitis and choroiditis, disease of the optic nerve or old opacities of the vitreous.

THE CALINGA: THE PHILIPPINE HEAD-HUNTER

The adventures of an American surgeon who has "followed the flag" into the remoter mountain fastnesses of the Philippines, lived among strange people and had some thrilling experiences

By THOMAS E. MOSS, M. D., Tuguegarao, Cagayan Province, P. I.
Surgeon in the Philippine Constabulary

THE Calingas, in my opinion, are the most interesting natives of the Philippine Islands. They are a distinct type and are not to be confounded with any other of the numerous tribes which are to be found in this wonderful group of islands.

The Calingas are essentially mountain dwellers, building their *rancherias* on top of the most inaccessible elevations they can find. Their houses are built upon posts and are on an average ten feet from the ground, the door being reached by means of a bamboo ladder. These houses are very strong, being built from boards hewn out of solid logs with the head-axe. No nails are used in retaining the boards in place; but they are tied together with rattan. The roof is made of nipa, which is a kind of palm, the leaves being laid on in shingle fashion to the thickness of two or three feet. This constitutes one of the chief sources of danger to the inmates. The floors are made of long strips of bamboo laid lengthwise, two or three inches apart, which is another source of danger, to be described later. These pieces are bound down tightly to the cross-pieces with thin strips of rattan, called "*bijuco*" (pronounced "behhokar").

All around the sides of these houses are placed wooden shutters, tied in place so that they can be cut loose from the inside at a moment's notice. All around each collection of houses runs a palisade of sharpened bamboo stakes, driven in the ground, with row after row of bamboo spears placed in the ground outside, slanting, and pointing away from the fence. Not content with this, every night little wooden spears are placed in all trails leading to the *rancheria* and in the grass at different places round about. These spears are a cruel contrivance and are cunningly concealed by leaves or a few blades of grass. Every morning they are taken out of the trail, and they are never put back in just the same place.

By the side of the main trail, for a greater or lesser distance, you will see pieces of bamboo, six inches thick and eight feet long, sticking upright in the ground. About four feet from the ground the bamboo is split lengthwise into hundreds of pieces and the pieces are spread out and woven together with rattan, thus forming a basket. In this basket you will find the grisly trophies of the chase—skulls. I have counted as many as 185 of these head baskets along one trail. At the end of this

A Group of the Calinga People

trail, nearest the houses, is a little miniature house about two and one-half feet by four; it is built up on piles, the same as the large houses, only it is not raised from the ground more than five feet. Its use will be explained later.

The Agriculture of the Calingas

These people raise rice, corn, tobacco, sugar-cane and vegetables. I have seen sugar-cane growing to the height of twenty and thirty feet, having to be braced up, tied to a piece of bamboo set in the ground at the root of the cane. I suppose the bamboo is placed there when the cane is young, and as it grows the cane is tied to it. The rice, corn, sugar and cane fields are not near the houses; sometimes they will be six miles away. You see a Calinga can put his stuff *anywhere*, but his house must be in a well-protected place or he will never live to see the fruits of his labor; and they do not mind walking in their own neighborhood.

You will find no furniture in the Calinga's house. There is a box eight inches deep, two feet wide by three long, full of ashes, and imbedded in the ashes are three stones upon which the cooking vessels are placed. They consist of one or two oyers (round earthenware jars) and one steel skillet, which is round and concave, not being flat-bottomed as one would suppose. Nothing else is to be seen except the spear, shield and head-axe, and properly speaking they will not be in the house but in the hands of the Calinga.

I suppose the scarcity of articles of value is due to the fact that among the Calingas there is a custom that if a friend comes in and sees anything that he wants he is welcome to it. So, to offset any such possibility, the man of the house doesn't have anything for him to *desire* lying around. It is the same or nearly so in regard to the crops, explaining why a Calinga may with impunity place his fields of grain so far from his house. No Calinga will steal or destroy any other Calinga's things. If he is hungry when passing he will take enough to eat but no more, no matter how bitter an enemy he is; he does not steal anything but heads! He will steal heads of any size, shape, fashion and in any way he can get them.

Vassi—the Seductive Beverage

The Calinga makes an alcoholic drink out of the juice of sugar cane, called *vassi*. It is very deceiving, for it tastes mild and sweet but within its purple depths there lurks chained lightning, about two quarts to the pint cup full.

Now just a word in regard to this *vassi*: In order to make this mild beverage more palatable and stimulating, as well as to

clear his trophies of particles of flesh and to bleach the bones, the Calinga who has just returned from a head hunting, or I should say, a successful *religious* pilgrimage, scrapes all the flesh from the head of his converts, takes out the brains (the latter I am not sure of) and puts the skull in the jar of *vassi* where it remains until the jar is opened upon some great occasion. Of course *all* heads are not put in the *vassi* jars; if they were, there would not be any room for *vassi;* that is why the little house is built at the end of the row of headbaskets. The heads are put in it to bleach, along with the head of a dog; but I will tell you about that later.

Appearance and Dress of Calinga Women

The Calinga women are as a rule not nearly as tall as the men but are a great deal lighter in color. I have never seen a real black Calinga, even among the men. The women are a light yellowish-brown, not an ugly color but a color that is very pleasant to the eye, coupled as it is with the round face and small mouth and eyes (both well shaped); the eyes are black and hair long and black as midnight. These women are strongly built but at the same time have very good figures; their feet and hands are small. They wear nothing but the Ge string as a rule, though they have a short shirt made from the ba[illegible]f a tree and whenever visitors [illegible]re, put it on.

Of c[illegible]e the chief's wives have sometimes cloth for dresses, red and blue and yellow, and when dressed in all their splendor look very nice. They do not have knives but use a miniature head-axe for peeling vegetables and such work. These women carry their babies in a blanket, slung upon their backs, the blankets passing over one shoulder, under the other arm and tied in front. The average woman is about five feet six inches in height.

Obstetrics Among the Head Hunters

When a woman feels the pains of labor coming on she immediately repairs to a certain place, fixed for this purpose. It consists of two pieces of bamboo, one lashed to either side of two convenient trees, the space between being large enough for the head and shoulders to pass through but not the pregnant woman's abdomen. The woman crawls up between these pieces of bamboo until the upper part of her abdomen presses against them; then she reaches up and grasps another piece of bamboo that is placed above, and pulls up with her hands, at the same time pressing up with her feet and legs. In this way the baby is pressed and squeezed out. The husband, who is kneeling down between her legs, catches the baby, wraps it in banana leaves, and carries it into the house. The woman, after getting rid of

Some Calinga women

the placenta, washes herself and goes into the house, washes the baby and goes about her work.

Among these people each *rancheria* is always at war with every other one, so no member of the community is safe at any time. Every time one steps outside of the stockade he simply takes his life in his hands, and sometimes when he doesn't go out; but that is not the point I wish to demonstrate: it is this—that on account of this and other things intermarrying is a natural consequence. To minimize the bad results of this, and to better the stock, the chief of one *rancheria* will swap a male child with another chief from a distant *rancheria*, thereby bringing new blood, and in this way the stock is kept in good condition, to judge from the fine looking men. A child is married when two or three years old, that is, two chiefs will get together and decide that their son and daughter shall marry; so the girl is brought to the boy's house and lives there until the boy is grown up to manhood and has enough of this world's goods, consisting of house, head-axe, spear, shield, heads, dogs, one hog and a jar of *vassi*.

Calinga woman, in her best. From a drawing made by the author

He then announces his intention of marrying. The dog and hog are killed, the dog is cooked with rice, the hog is thrown into the fire until all the hair is burned off, then cleaned and put into a large concave steel skillet and a little water is put in. While the feast is cooking, the jar of *vassi* is brought out and opened; the head man of the *rancheria* takes a cup, drinks himself, passes it to his children, and from them it goes around the ring, never stopping. In about ten minutes begins one of the wildest dances any one has ever seen.

A Wild Dance in the Heart of the Mountains

I saw this dance up in the heart of the Apayao Mountains, where I with Captain Henry Knauber had led an expedition. We had reached a *rancheria* at nightfall, had taken possession of the chief's house, putting the soldiers beneath, and stationed guards. The chief's two wives had brought in their contribution to our supper, consisting of rice, corn, mountain chicken, sugar-cane, water and *vassi*; coupled with sundry articles from our stock of canned goods, this made a repast that many a man would have enjoyed.

We ate all we could, which was considerable, as we had marched all day, stopping only half an hour at dinner time, and, having appetites like wolves; after eating everything in sight we stretched ourselves at full length upon our blankets on the floor, our eyes peering forth through the opening made by taking out some of the detachable shutters, while the soldiers beneath us conversed together softly, the murmur of their voices reaching us in a sort of lullaby.

It was a black scene that we looked out upon. The aperture through which we gazed yielded but a contracted vista of what was passing without. A gloom of forest trees, huge, motionless, impenetrable to the eye, framed that central view; but the space immediately in our foreground was brightly illuminated by the red blaze of the fire and crowded with dark figures, whose nude bodies showed weirdly in the glow. It was a restless mob, its members gaily bedecked

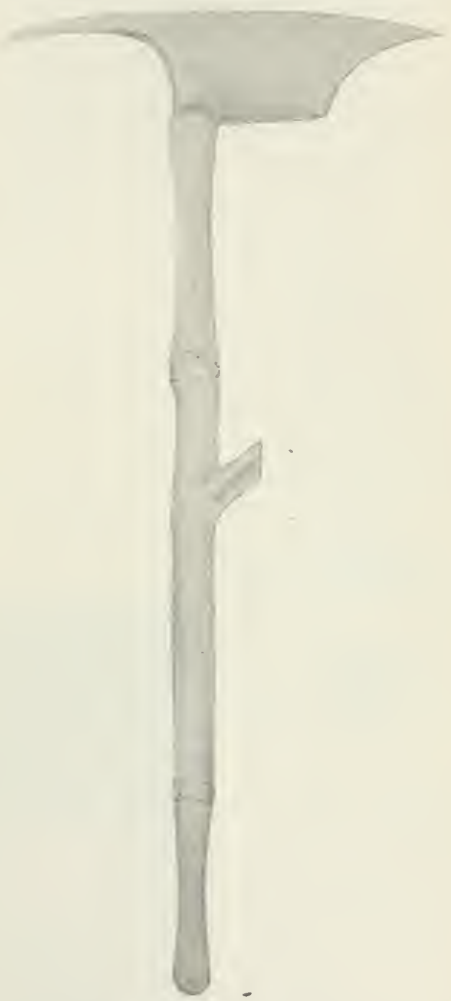
with barbaric splendor, many having blackened faces, or with bright colorings streaked upon their forms. Some were dancing, a wild frenzied succession of leaps; again a shuffling of feet, the feet slid along and not raised from the ground, ever circling about a central form standing erect and motionless; keeping in their gyrations slight time to the monotonous but rapidly beating drums and brass pans, while the ceaselessly waving weapons overhead sparkled cruelly in the light.

A Grotesque and Terrifying Scene

When wearied, these dancers gave way to others from the restless throng of onlookers, who would spring forward with yells of wild delight, flinging themselves into the fierce maelstrom with ferocious freshness, urging the more tired ones to higher leapings and fiercer paroxysms. Women moved about, mingling their shrill screams with the more guttural shouts of the men, while dogs were everywhere, yelping and howling dismally. It was a demoniacal spectacle, grotesque and awesome, especially in such a time and place.

We were the only white men that had been through this country, and we were a hundred miles from the nearest outpost. Not knowing what the demonstration was meant for, we could only grasp our weapons tighter, and with nerves and muscles tense wait for the first sign of hostility, while watching a scene rendered even more horrible by the intense gloom of the tropical foliage and lowering mountains amid which it was being enacted, and the silence of those watching, each man grasping a rifle, while his ears were strained to catch the first note of the bugle, "Commence firing."

I gazed upon it not without any personal fear, yet feeling a horror I was unable to cast off, each whirling figure hideous with streaming hair and barbaric decorations seeming some devil of malignity, some foul fiend whose breath must poison the atmosphere and deal death by torture; yet it fascinated me, so unnatural was it, so filled with the brooding spirit of insensate cruelty, that I could realize its expression in every convolution of those naked bodies, every wild glare of those roving eyes. It looked more like a war dance than anything



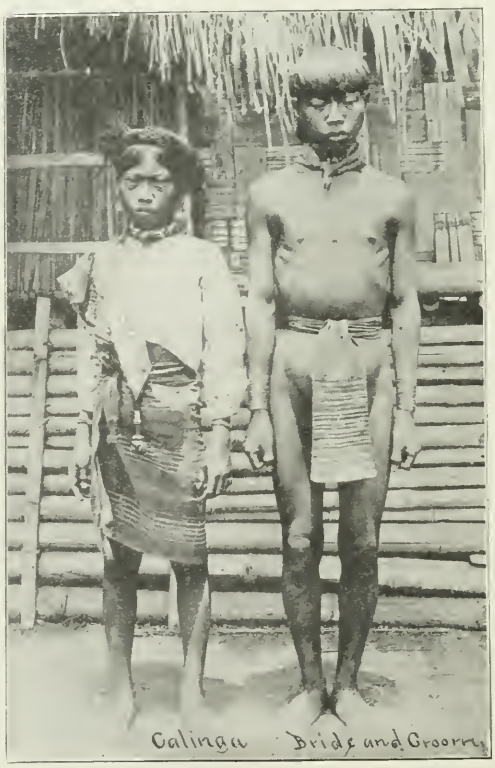
A Head-Axe: Used to finish victim after spear has been thrown. The shoulder on the side is used for carrying the head

else to me, and it may have been—we only had their word for it that it was not.

The queerest part was yet to come. The crowd of circling dancers began to grow smaller, until only a few remained, still forming a circle around the living statue in the center. Then two maidens rushed in from opposite sides of the circle. These women were stark naked, not a thread of cloth upon their bodies, their long black hair falling in profusion upon their breasts

and shoulders. One woman was armed with a spear, the other with a head-axe. They confronted each other in front of the central figure; then a chant went up from all the women clustered about outside, the drums never ceasing and all keeping time. The two girls commenced to circle about each other, keeping time to the drum, each one looking for a chance to sink her weapon into the body of the other. In an instant they were striking and stabbing. You can imagine what we two felt, who did not know that it was all in fun, or rather part of the dance.

Finally the girl with the spear succeeded in conquering the other, both being on the ground, locked in what we thought the death struggle. Then, and for the first time, did the central figure move; stooping, he raised the conqueror to her feet, giving her a beautiful spear; she, leaning on it, rocked from one foot to the other, all the time facing him and keeping time to the music. She danced thus for at least half an hour, singing all the time and all the time growing weaker, the husband-to-be giving her from time to time *vassi* to drink. This part of the dance was no play, for the sweat was pouring from her body in a perfect stream. This was to show the husband-to-be her power of endurance. Finally, when she was exhausted, he knelt before her and she fell upon him, pushing him over backward, her arms around his neck, her body shielding his, as she thereby promised to do in the life to come. He then arose and walked to his house, she clinging to his neck, he carrying her.



The bride and groom

A Blood-Curdling Wail

I want to say just one word about the cry that the women start when the fight begins; it is the most unearthly blood-chilling wail that I ever heard, and, as I am living, I never want to hear it again. I never heard the wail of a lost soul, but I imagine that there is nothing more like it on this earth than the thrilling war-cry of the Calinga woman. The two women in the scene are fighting for the man; of course the choice of the man always wins, at least I think that is the way, but there is no telling what happens when there are no white man's eyes to see. I have seen Calinga men fight in earnest for the hand of a woman, and why may not those of the other sex?

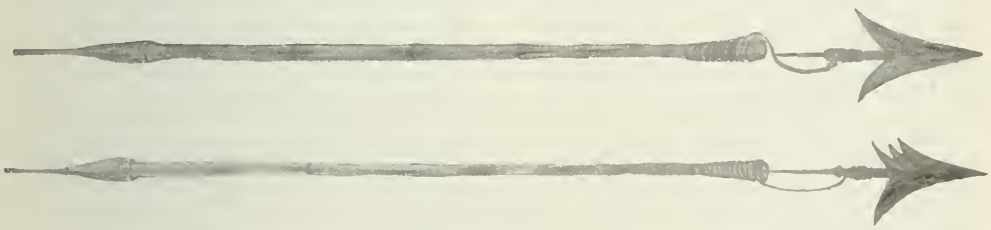
One of the customs of the Calinga is that no person shall enter the house of another without first striking a loud blow upon the ladder leading up to the door. If any one fails to do this he is liable to be speared before he gets half way up the ladder.

I told you I would tell you why the floors made of bamboo strips are a source of danger; it is because a spear can be thrust up through them and into the sleeping Calinga if he happens to forget to sleep on his shield, which he seldom does for very obvious reasons.

The male Calinga averages about five feet ten inches in height, is lithe and wiry and all his

muscles, especially the muscles on the front of the legs, are well developed from constant mountain climbing. The hair is never cut except in front, where it is banged off even with the eyes. The Calinga wears no hat but winds a long piece of cloth around the head, the hair being done up in it. This and the string is all that is used in the way of clothing. The Calinga is not thick-lipped, nor has he any other of the characteristics of the negro; they have thin lips, regular features and small hands and feet. They are Indians.

They are all a murderous lot. There are no good Calingas but dead ones. Head hunting is their religion and they are all good church members. Every year, just as soon as crops are planted, they start out after heads. They say if they do not get some heads at this time the crops will fail and they will all starve. Now don't think that they do not hunt heads "between times," because they hunt them all the time; this crop-planting time is just a sort of revival or camp-meeting, as all good religious denominations have.



Some Calinga Spears

A Head-Hunting Expedition

The way that a head-hunting expedition is generally conducted, is for six of the best men to start out at night, armed with spears, shields and head-axes. They decide on a certain *rancheria*, probably twenty or thirty miles away. They travel entirely at night and do not take the trail, but hike through the mountains. They try to reach the *rancheria* just at dawn, and when the people come out of the houses, they rush in, kill all they can, cut off a head apiece, and are gone before the *rancheria* has time fully to realize what is being done. They either do this or in the dead of night they throw a burning brand on to the roof of a house, and as the inmates rush out they are killed. The Calinga spares neither woman nor child, but kills everything in sight.

When the expedition is successful, they return home. If there has been but one head taken, it is cut up equally and divided among the members of the party. When they reach their own rancheria, they have a big feast and dance, something on the order of the one I have described, only with variations. Sometimes the Calingas hunt in pairs; they then generally lie concealed by the side of the trail, having first placed the little sharp spears so that any one passing will wound his foot. While he is occupied in pulling out the sliver, the concealed Calinga spears him, cuts off his head, sticks his head-axe into it, and goes home.

The little spears are also used to retard a pursuer. For instance, a Calinga is running away from another. He stoops down, places a spear in the trail and then goes on. You see the pursuing one has to look out and can't run as fast as he otherwise could.

A Calinga Deer Hunt

Another interesting thing about these people is a Calinga deer hunt. They do not hunt like the Fillipino. They come down out of the great mountains where they live, out into the foot-hills which are devoid of timber. Timber among the foot-hills only grows in the draws, and not there except there be a spring or stream of water of some kind. Sometimes five hundred Calingas (hardly ever that many) will pick out a place, generally consisting of four or five of these foot-hills. They begin about dark and stretch a rope (made of the bark

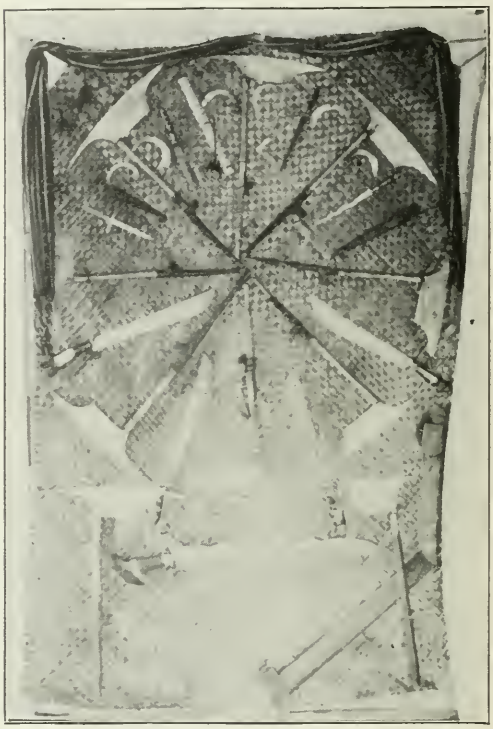
of stalks of a palm, which is white) all around these foot-hills, making a circle. Sometimes this rope is five or six miles long, but it does not weigh anything to speak of. The rope is laid on top of the grass and there is no break in it except where there is a net concealed.

The deer over here feed exclusively at night, and when they start to move to the feeding grounds they see this rope and go back. They will not pass it, not even the next day when the dogs are running them. After everything is fixed the Calingas lie down and sleep, but are up at daybreak taking their stations. The first to move are those whose duty it is to watch the nets. They have short spears as a rule, but sometimes they only have clubs. They lie concealed in the grass and when the deer runs into the net they jump out and spear it.

I saw one of these fellows punished for going to sleep. The deer ran into the net and tore it loose and got away. When the men and dogs came upon the sleeping Calinga each man took a whack at him. It was pretty rough business, but the delinquent took it without a word. But to get back to the hunt. After the men who are placed to watch the nets are stationed, the next batch moves out and stations itself all over the hills and valleys within the circling rope. They hide in the grass and kill the deer with spears and arrows, the deer being run out of the woods by the other men who, with dogs, go down the draws and hollows where the little strips of timber are. These men, to my notion, while they have the hardest work to do, have the best time, for while they kill very few deer, because the deer run for the open, they kill many wild boars, for the boars will not take to the open but dodge in and out and hide until the dogs or men stumble over them, when they put up a fight that is worth seeing.

The Boar-Spear and Boar Hunting

I will tell you here how the boar-spear is made. The blade is three inches wide with barbs that slope back and out; the barb and blade together are about five inches long. Then the round piece that runs back into the handle has an enlargement on it, just where it enters the handle; here is tied a piece of rope. The rope is then wound around the handle of the spear and fastened to a notch *in* the handle.



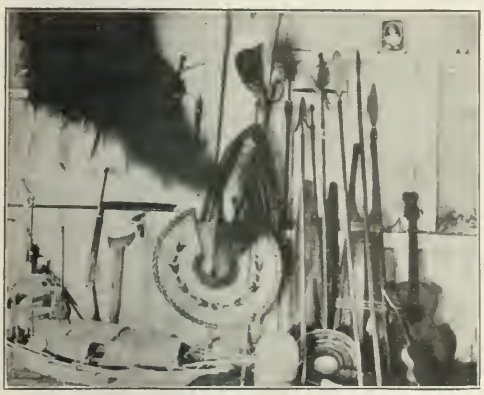
Part of Dr. Moss' Collection

The spear is not fastened tight in the handle but is made so that when it is stuck into the hog the point will stay *in* the hog, being prevented from coming out by the barbs. The spear then comes out of the handle and the handle drags at the end of the rope; the rope is about three feet long, very small, but tough and strong.

When the handle comes off and drags, it catches in the brush and impedes the progress so that the Calinga can catch up and spear the boar again with a longer spear, one without barbs, one that will not stay in the wound but will drop out and can be picked up and thrown again. Each beater generally has three spears; one barbed, with rope as described above,

one long, sharp and without barbs, and one with a short strong handle, long keen blade, with barbs running the entire length of the blade; sometimes the blade will be a foot long and have a half dozen barbs on each side.

This spear is used when a boar or carabao charges the beater and there is no time for the beater to escape. This of course seldom happens, for the beater generally takes to a tree; but when he is caught in a place where he cannot escape he plants the end of the handle of the spear in the ground holding it firmly. He allows the charging



Some More of Dr. Moss' Collection

brute to impale itself upon the many-barbed point. There is no use trying to get this spear out any other way than by cutting it out; if the animal is not killed on the spot it soon will be, because the end of the handle will strike against the ground or trees and each time it strikes anything it is driven deeper and deeper. There is also a groove that runs down the shank of the spear and down the handle; this is for the purpose of letting the blood escape freely from the wound, thereby bleeding the animal to death, even though the spear did not strike a vital spot.

After the hunt is over all the deer and wild boar and wild chickens are brought into camp. The deer are skinned and cut up in quarters and hung up in trees where the flies quickly blow the meat. The hogs are first dipped in water, then held over a blaze until the steam from the wet hair has scalded the flesh; they are then taken out and scraped clean. The clotted blood on the inside of the deer and hog is collected, put into a great earthen pot over the fire; into this is put the cleaned entrails with some rice, and this is what the hunters eat together with a stew made from the lungs, livers and hearts. I do not object to eating this, but the other—please excuse me! When the hunters have eaten all they want the meat is divided and all go home.

—:o:—

This interesting narrative will be continued next month. Dr. Moss, who is a surgeon in the Phillippine constabulary, has served in the most out of the way and least visited portions of our faraway island possessions. He has had adventures, thrilling ones, and such as fall to the lot of few members of "The Clinic family." Some of these will be narrated in the next number of CLINICAL MEDICINE.—ED.

Progress depends upon what we are, rather than upon what we may encounter. One man is stopped by a sapling lying across the road; another, passing that way, picks up the hindrance and converts it into a help in crossing the brook just ahead.—Trumbull.

THE HEMLOCK AND ITS ALKALOIDS

A study of the botanical characteristics, medical history, physiological action and therapeutics of Conium maculatum and its alkaloids, particularly cicutine or coniine

By J. M. FRENCH, M. D., Milford, Massachusetts

CONIUM maculatum (common names, cicuta, hemlock, spotted hemlock, poison hemlock, poison parsley; natural order (Umbelliferæ) is a large, biennial, umbelliferous plant, having a general resemblance to parsley. It is indigenous in Europe, Asia, and the northern parts of Africa, and was introduced into America from Europe. It grows commonly about fields and hedges, and in moist shady places, flowering in July. The root is long, white, of the thickness of the finger, contains, when young, a white milky juice, and resembles both in form and size the carrot. The stalk grows from three to six feet in height, is hollow, smooth, and marked with red or brown spots. The leaves are large, compound, with lanceolate, pinnatifid leaflets of a dark-green color, and having a faint disagreeable odor, which has been variously likened to that of musk, copper, mice, and a cat's urine. The flowers are white, and arranged in compound terminal umbels. The seeds are double, ovate in form, the two sections adhering by the base, and ribbed longitudinally on their convex surface. The whole plant is a virulent poison, but varies much in strength according to circumstances. Both the leaves and the seeds have been used in medicine, but the medicinal activities of the plant are best represented by the full-grown, unripe fruit.

Medical History of the Hemlock

The hemlock was well known in ancient times, and frequent allusions to it are found in classic history. It is believed to have been the state poison of the Athenians. Dioscorides ascribes to poisoning by it the symptoms of vertigo, confused vision, hiccough, mental disturbance, coldness of the extremities, and convulsions. Nicanor adds to these symptoms that of a sense of suffocation. It is supposed that this was the plant by means of which Socrates was put to death on account of his teachings to the young Athenians. The classic description of his death affords a good description of the symptoms of poisoning by hemlock. "Socrates, after swallowing the poisoned cup, walked about for a time as he was directed by his executioner; when he felt a sense of heaviness in his limbs he lay down on his back; his feet and legs first lost their sensibility and became still and cold; and this state gradually extended upward to his heart, when he died convulsed."

It is claimed by some authorities that hemlock is identical with "gall," as mentioned in Matthew xxvii, 34, "They gave him gall to drink," and some other passages of scripture. This claim is based on the fact that the Hebrew text makes use of the same word, "rosh," for both hemlock and gall, the inference being that the two plants are one and the same.

Dioscorides declares that the powers of the plant differ very much according to its locality, mentioning Athens as one of the places where it is most powerful; while Matthiolus states as a notorious fact that the conium of Italy is inferior to that of Greece. These statements correspond very well with what is known today as to the variability of the plant, though we now know that many other things than locality have to do with its difference in strength under different circumstances.

It has been found that some animals can eat conium without injury, while others are easily affected by it. Sheep and goats are little affected by it, rabbits and horses are seldom injured by it, oxen, wolves and

dogs suffer much from it, while dogs, on account of their vomiting readily, usually escape with their lives.

From whatever causes, it is a well-known fact that conium is an uncertain drug, and its action not to be depended upon. Some writers report results which indicate great activity, while others under apparently similar circumstances and dosage have utterly failed to secure these results. For these and other reasons, the use of the crude drug conium and its galenical preparations has been almost wholly abandoned. Cushny says conium has passed into almost complete disuse. This statement, however, does not hold good of the alkaloid.

Preparations and Constituents

The only official preparation, according to the Pharmacopeia of 1900, is the fluid extract. Other preparations are the extract, the alcoholic extract, and the tincture. The British Pharmacopeia has an active preparation in the shape of the expressed juice, preserved by the addition of one-third of its volume of alcohol, and known as succus conii. The eclectics employ a preparation which they call specific conium, and which is in effect a superior form of the tincture. There is also a homeopathic mother tincture.

The chief active ingredients of conium are coniic acid, a volatile oil, and three alkaloids, coniine or cicutine, methyl-coniine, and conhydrine. Certain other substances are sometimes formed during the processes of manufacture, but are not natural constituents. Of the alkaloids, coniine or cicutine is the only one which is employed to any practical extent in medicine. This is a volatile liquid, somewhat lighter than water, having an acrid taste, an alkaline reaction and the characteristic odor of the plant. Its chemical formula is $C_8H_{15}N$. If exposed to heat it is quickly decomposed, and even exposure to the air soon renders it inert. Its principal salt, the hydrobromate of cicutine, however, is a stable preparation, a solid, resisting the air, soluble in water, and containing 60.7 per cent of cicutine. It occurs in white needles or a powder, and is soluble in about two parts of alcohol or water. This is the preparation which is generally made use of at the present day, and which has rescued this drug from innocuous desuetude and given it a place among the most valued of the active ingredients in use by alkaloidists today.

In studying the actions and uses of this drug, we shall confine ourselves mainly to the consideration of the alkaloid cicutine, as the other alkaloids have a similar but weaker effect, and are little used in medicine.

Physiological Actions of Cicutine

The primary physiological action of cicutine is to cause motor paralysis without loss of sensation or consciousness.

"The chief symptom produced in man by coniine when taken in doses just large enough to impress decidedly the system, is great muscular weakness or languor, with some disorder of vision and giddiness. On attempting to walk, the patient suffers from a feeling as though his feet were made of lead, and he staggers and falls from the refusal of his knees to support him. There is an intense desire to lie quiet in the horizontal position, and as the eyelids are especially affected, the eyes are kept shut." (H. C. Wood).

It paralyzes the motor nerves from below upwards, the action beginning at the peripheral end-organs and extending to the nerve-trunks and finally the nerve-centers, the muscular irritability meanwhile remaining unaffected. Death results from asphyxia, or paralysis of the muscles of respiration, and not by cessation of the heart's movements, which continue after respiration has ceased.

According to Bartholow, when coniine is given hypodermatically in the largest doses consistent with safety, it induces sleepiness, vertigo, coldness of the surface, diminished sensibility, and weakness of the inferior extremities. The respiration becomes slower and less full. The pulse diminishes in number and force, falling as much as thirty or forty beats per minute.

In cases of poisoning by cicutine, after the loss of the power of voluntary motion,

there is the loss of the power of vision more or less complete. Meanwhile the paralysis of respiration and the slowing of the heart's action continue and progress, while the mind usually remains clear until the very last, as in the case of Socrates or in other cases, until it becomes clouded by carbonic-acid poisoning. The temperature is decidedly lowered by poisonous doses of coniine. No action on the secretions has been noted.

Cicutine is excreted mainly in the urine and the breath.

Therapeutic Indications and Uses

The chief therapeutic use of cicutine is in the treatment of diseased conditions characterized by excessive motor activity.

In these cases large doses are required, as some degree of physiological action is necessary. The patient is in constant motion. Shaller says that it has the same indications and uses as bromide of potassium, than which it is less harsh in action and much pleasanter to take. Accordingly, it has been made use of as a motor sedative and depressant in chorea, tetanus, paralysis agitans, angina pectoris, asthma, pertussis, laryngismus stridulus, and other maladies of a like character.

In addition to its primary effect in allaying motor excitement, it has a slight sedative effect upon the sensory nerves, and this combination renders it of special value in the treatment of nervous and mental diseases, and especially of insanity, acute mania, acute alcoholism, and delirium tremens. In epilepsy and hysteria it has been tried, but has been less successful than some other agents.

It has some local anodyne effect, and has been employed in the form of an ointment in such maladies as herpes zoster, neuralgia of the superficial nerves, and muscular rheumatism. Ellingwood and others recommend it for relieving the pains of cancers and ulcers. Especially in cancers and ulcers of the stomach, it seems to relieve the pain better than other and more powerful drugs, but to secure this result it must be used in full doses.

Used with an atomizer or in the form of vapor, it relieves painful, spasmodic and irritative coughs, as in catarrh, bronchitis, laryngitis, and phthisis.

To produce its best effects in many painful and spasmodic affections, it should be administered hypodermically. It may for these uses be combined with morphine and hyoscine. The hydrobromide is the best form for this use.

Administration and Dosage

The standard alkaloidal granules of the alkaloid are: cicutine, grain 1-134; cicutine hydrobromate, grain 1-67. The latter is the preferable form and dose for an adult. It should be given by the intensive method of dosage, "for effect;" one granule may be given every half hour until the effect is secured, or four granules every two hours for a few doses. Shaller gave six granules of 1-67 grain each, every two hours, to a young man who had been drinking beer for a number of days so that he was constantly more or less intoxicated, and had become abnormally active, both physically and mentally. He was in constant motion, walking both day and night, never resting for a moment. After taking the third dose, both the muscular and mental activity quieted down, and he lay down and went to sleep, awakening in due time without a return of the annoying symptoms which had previously troub ed him.

The dose of the fluid extract as usually given varies from one to fifteen minims. The tincture is given in from 10 to 30 minims, and the eclectic preparation, specific conium, in from 1 to 5 minims. None of these preparations, however, are to be relied upon equally with the hydrobromide of the alkaloid.

PHARMACOTHERAPY AND PHYSICOTHERAPY

The necessity for the study of physical and psychical methods of healing, and the correlation of this knowledge with that obtained from pharmaceutical study; drug and drugless methods should work harmoniously together

By DEXTER BUCK, M. D., La Porte, Indiana

PROBABLY no department of medical science has made greater progress during the present decade than that of internal medicine. By this remark we do not wish to infer that any great advance has been made in the discovery of new specifics for disease, but that an era of scientific experimentation and chemical industry stamps the present decade from a pharmacological standpoint as one of the greatest in the history of medicine. This advance applies not only to the standardization of fluid extracts and tinctures, which today is practically international in its scope, but includes the manufacture of organic and inorganic compounds, various sera, synthetic chemic products and the isolation of active principles from crude drugs, such as alkaloids, glucosides and resins.

While the advance in pharmacotherapy has been marked, no less important is the advance along the line of physical therapeutics. In consequence of the success attending this latter form of treatment two schools of therapy are the result, the one holding steadfastly to the use of drugs, the other endeavoring to combat morbid conditions by so-called natural and physical methods.

Physiotherapy and Physicotherapy

Dr. Riviere makes a differentiation between the terms physiotherapy and physicotherapy. He says: "Physiotherapy is the use of all natural agents." Thus we see the term is very broad, so broad in fact that it not only includes the use of drugs and chemicals but every known natural and physical utility for the treatment of disease. On the other hand, physicotherapy is a restricted term and can be characterized as a curative method based upon the combined employment of physical agents."

In the treatment of acute infectious diseases the superiority of medicines is probably unquestioned, for here we have acute toxemias due either to the action of bacterial toxins or to errors of cellular metabolic processes, and the use of drugs will more quickly stimulate the various emunctories and more quickly hasten the elimination of poisonous products. However, in the field of chronic diseases it takes powerful forces to produce katabolism and encourage anabolism. These forces act powerfully upon altered conditions and do not depend for their action upon assimilation through the alimentary canal as in the case of drugs, but stimulate or inbihit cellular activity either directly or indirectly through the central and sympathetic nervous systems.

Our Debt to Homeopathy

During the past two centuries three important systems of treatment have digressed from the regular scientific pathway of medical rectitude and gained some repute, namely, homeopathy, Christian science and osteopathy. While the dynamic theories of Hahnemann are today untenable in the light of modern progress, for Davaine and Pollender had not then discovered the bacillus anthracis, yet to homeopathy medical science owes much, for, as a factor, it has made us more simple, more exact, more rational and has given an increased impetus to scientific investigation and study.

In Christian science medicine has had a formidable foe. Its converts are principally neurotics whose sincerity and earnestness is unquestioned. The Christian scientist, accepting the idealistic philosophy of

the Hindu, denies the existence of matter, denies his own material entity, denies the existence of disease, although its healers attempt to cure what it claims does not exist. Christian science impresses upon the doctor of medicine and the doctor of philosophy that there is an intimate correlation between mind and matter, that the one is dependent upon the other. Christian science has stimulated an interest in psychiatry, and while the vegetative processes of conscious and subconscious life are as yet unsolved mysteries, still a knowledge of psychology enables the physician to understand and explain the so-called marvelous cures of the Christian-science healer and, better, enables the physician to cope with the increasingly large number of psychoses and neuroses.

Osteopathy is the most recent claimant for therapeutic honors. As to the theories of its founder you are all doubtless familiar. Suffice it to say, every diseased condition is alleged to be due to a bony or interligamentous lesion of the spinal column, yea, even from brain tumor to soft corns. Their practice consists of certain manipulations and massage of the muscles whereby cellular equilibrium is reestablished.

Therapeutics of Yesterday and Today

What has all this to do with the doctor of medicine you may ask. Simply this, the therapeutic measures of yesterday are not the therapeutic measures of today. It means that a large class of chronics and so-called incurables wander from physician to physician, seeking relief from real or imaginary ills, finally falling into the hands of the faith curist or osteopath, to the detriment and dishonor of our noble profession; it means further that a large number of educated, broad-minded physicians are thinking and acting. All that the masseur and the magnetic and mind healers can accomplish we can do, and far more, through the intelligent correlation of pharmacotherapy and physicotherapy.

The six natural forces which act upon body tissues so favorably, by augmenting oxidation, increasing elimination, encouraging metabolism and producing nerve bone and muscle pabulum are:

1. Electricity, comprising its various modalities, namely direct, indirect, static, D' Arsonval, Oudin and Tesla currents.
2. Water, comprising hydrotherapy, balneotherapy and vapor baths.
3. Motion, comprising massage, kinesitherapy and orthopedia.
4. Light, comprising radiotherapy, phototherapy and actinotherapy.
5. Heat or thermotherapy.
6. Air, comprising pneumotherapy and aërotherapy.

The use of electricity in gynecology and surgery as a diagnostic and therapeutic measure is now an established fact. In certain pelvic conditions its superiority to the knife is well recognized. The recent work of Massey at the American Oncologic Hospital in Philadelphia in the treatment of benign and malignant neoplasms by massive zinc-mercuric kataphoresis is too well known to require further comment. The wonders of the x-ray cannot half be told in its sphere of usefulness in the diagnosis of certain organic diseases, Glenard's disease, and in fractures, while from a dermatological standpoint its usefulness is almost limitless.

Water has been held in reverence and used by man as a curative agent since his creation. For centuries the Hindu has dragged his aching and emaciated body to the sacred water of the Ganges in order to bathe therein. More recent history tells us that Ponce de Leon searched in vain amid the everglades of Florida for "the fabled fountain of youth."

The Brand method of controlling hyperpyrexia in typhoid, the Nauheim treatment for functional and organic cardiac troubles, the various hot springs and hot baths in the treatment of syphilis, rheumatism and allied diatheses are well known to all. The old saying of Hippocrates that cold water warms and warm water cools is as true today as it was centuries ago although many believe just the opposite.

In a recent article upon pneumonia in the *Journal A. M. A.* Dr. Dock says: "I

admit it requires some courage and involves much difficulty to change from the use of the hypodermic needle or Dover's powder to the ice bag, but those who have used the latter will agree with me when I say that one can often see the patients crying with pain in spite of liberal doses of morphine who finally become calm with the ice bag."

Mechanical vibration will surely supplant manual massage. The Lorenz method and kinesthetic exercises are yet in their infancy. Heat, light and air are therapeutic utilities whose possibilities can be greatly enlarged.

To be successful in this line of work a physician should possess several attributes: He should be a shrewd diagnostician, use good judgment, exercise careful technic and close attention to details and possess a thorough knowledge of the fundamental principles of physiology and pathology.

It has been the purpose of this paper to endeavor to indicate how harmoniously drug and drugless methods may be correlated by a versatile, general practician.

—:o:—

Dr. Buck's paper gives much food for thought. The physician should be conversant with *every* method which gives promise of aid to his patients; he owes it to himself as much as to those who employ him to develop to the uttermost his therapeutic capabilities. This spirit will inevitably bring the really big and broad-minded men to the study of electricitiy, massage and other physical methods. And just as surely the same spirit will lead the right kind of man to investigate everything of promise in drug therapy, for in spite of all that has been said and can be said the use of medicinal remedies will always remain the foundation of medical practice. The great need is for dependable remedies, of definite action —and that the physician should understand those remedies thoroughly and use them skilfully. By all means let us correlate all our therapeutic knowledge, weaving it into the most effective possible system. There is no place in medicine for a "physical" school of therapy as opposed to a "medicinal" one. Every physician should use *all* that is useful in *every* individual case.—Ed.

THE SCIENTIFIC TREATMENT OF ALCOHOLISM

The slavery of alcohol: the forms in which it presents itself, and how its victims may be reclaimed by adherence to scientific and rational methods of treatment, as herein outlined

By ROBERT COOK PREWITT, M. D., St. Louis, Missouri

THE treatment of alcoholism has been largely left to the charlatan in medicine. To those who witness the endeavors of victims to this addiction to sever their bonds it seems entirely within the bounds of legitimate medicine to come to their assistance. Extensive clinical experience in this line of work has led me to the conviction that by the use of simple and available agents, the physician can readily cure the desire for drink. This belief and my experience is the explanation for this paper.

Brilliant Men the Slaves of Alcohol

Several years ago my attention was very forcibly called to this condition, owing to the fact that some of my best friends, who were highly educated, well connected, of high moral integrity and brilliant minds—some of them professional men who stood high in their vocations in life—were slaves

to this unfortunate addiction. Some of these took a few drinks per day; others drank periodically; while others would drink day in and out, any and all times when it could be procured, going so far as to drink patent medicines for the purpose of deriving the benefit of the alcohol contained therein.

The most peculiar class to me were the periodical drinkers, who in their sober moments were polished and highly respectable, bitterly opposed to alcoholic drinks and strong advocates of prohibition, but when the desire for drink was present, these men seemed to become temporarily insane when alcoholic stimulants were not at hand, and would go miles to get "something to drink." Such a man would go on a spree lasting from two or three days to that many weeks. During this period he would drink until the entire system became permeated with alcohol; till he lost all claim to modesty and self-respect for the time being. This caused me to take up the study of this malady; and after an extensive clinical research, embracing the study of a large number of these unfortunates, I came to the conclusion, that with the exception of a very small percentage (which I believe have inherited the desire from inebriate parents) that it was an acquired disease. I still hold to this position.

The Stages of Alcoholism

I have divided alcoholism into three stages, namely: Subacute, acute and chronic. The subacute stage shows no pathologic changes save temporary digestive and other excitation. In the acute stage it is probable that the mucous membrane of the stomach and intestines is injected and covered with a tenacious ropy mucus, streaked with blood, while the kidneys and liver are in a state of active hyperemia. In case of death resulting from this cause, the brain and kidneys are found to be greatly gorged with blood. The gastroduodenal mucous membrane is also markedly congested, injected and covered with a thick, sticky, blood-tinged mucus.

In chronic alcoholism, the degree of pathologic change depends upon the inborn energy of the tissues, the age at which the drinker begins to imbibe and upon the quantity habitually consumed. The chief effects of chronic alcoholism are seen in the nervous and digestive system and in the kidneys. Fatty changes are found in beer drinkers, while connective-tissue overgrowth predominates in spirit drinkers. The mucous membrane of the stomach shows a condition of chronic, catarrhal inflammation, and dilation of the stomach is common in malt drinkers.

The muscular structure of the heart may undergo fatty degeneration, becoming pale and friable and the organ dilated. The brain often presents the changes of sclerosis in various forms; chronic pachymeningitis with slight hemorrhages are not infrequent.

The nerve cells, nerve centers and nerve fibers show degeneration, hardening and atrophy, and the neuroglia, vessels and ganglion cells of the spinal cord show similar changes. The liver shows the changes of chronic congestion, of fatty infiltration or degeneration, or of cirrhosis and contraction. The kidney changes are analogous to those of the liver; the chronic congested and fatty kidneys occurring mostly in those who have imbibed excessively of malt drinks, while in those who have been spirit habitues is seen the small sclerosed and fibrous kidney (Chronic Brights disease).

The post-mortem results found in twenty-five cases of delirium tremens, dying in the Philadelphia hospital, showed fourteen with the changes of interstital nephritis, eight with chronic parenchymatous nephritis, and three with fatty kidney; all showed chronic gastric catarrh and changes in the myocardium and the arteries of the heart and brain and the aorta.

The Treatment of Alcoholism

I believe the only rational treatment in alcoholism to be elimination and reconstruction, so I have based my treatment entirely upon this theory, and a large clinical experience of these conditions has proven

to my satisfaction that it is correct. I have only had a very small percentage of relapses and these acquire the addiction again in a primary way. I have had them tell me they began drinking simply to be sociable, believing they had the will power to resist.

To successfully treat these cases it is necessary to have the patient under control and observation, and for this reason I always insist on my patient going to a hospital for treatment.

During the past year I have treated a number of patients for this addiction in one of the leading hospitals in this city, with most satisfactory results.

I have no secret treatment nor claim to have made any wonderful discoveries, treating every case individually, using the following general treatment:

The patient arrives at the hospital, is consigned to a room and put in charge of a competent nurse who is instructed to give the patient whisky, unless there are conditions existing which contraindicate the continued use of alcoholic stimulants.

At 6 p. m. 5 to 15 grains of calomel and soda are administered and the patient is given a hot bath. If the patient shows no tendency to sleep, at 10 p. m. administer a bromide or sulphonal.

The following morning at 6 a. m. the patient is given magnesium sulphate, sodium phosphate or castor oil to produce copious purgation, which eliminates the calomel, depletes the capillaries and flushes the intestines, after which the patient is usually in a sobering condition with a craving for drink. I have found that a hot stimulating drink of some kind alleviates this desire.

After cleaning up the primæ viæ, I continue to keep the canal clean during the entire course of treatment, as it is very essential in the treatment of these cases.

Use Some Member of the Atropine Group

After securing copious action from the bowels, begin administering hypodermically, one of the atropine group, which I believe to be best suited to the individual case as an antidote to the alcohol in the system.

I have found atropine or hyoscyamine to be highly efficacious in a large number of cases.

The patient should be given a good nerve tonic, which is also a reconstructive; also, support the patient by the use of caffeine, brucine, sparteine, glonoin, digitalin, etc., as indicated, taking particular pains to get a good diuretic action from the kidneys. I have the patient take a hot bath night and morning during the entire course of treatment, believing that diaphoresis plays an important part in alcoholic elimination.

The length of time necessary to effect a cure is from ten days to three weeks, and while under the physician's care it is essential that the patient be treated kindly but firmly.

Rye whisky, four years old, should be given to patients; never use a drugged whisky to produce nausea and disgust the patient.

If the patient is a beer drinker, permit him to secure and open bottled beer, so he can be sure it is not "doped", or should he desire, also permit him to purchase whisky in original package.

The So-Called "Sickening Process"

I do not approve of the sickening process used by those who have made the so-called "wonderful discoveries," "which cure the unfortunate's addiction," holding that such harsh measures are entirely uncalled for and not needed if the case is properly handled.

The average person has a contempt for these unfortunates, stating that they are brutes, etc. They are shunned and cursed, worried and teased to make them act foolishly for the amusement of idle loafers, etc., much to the mortification of friends and relatives. They need kindness, consideration, not contempt; give them proper assistance, good advice and proper medical attention and they will make upright men, good sons, devoted husbands, loving fathers and industrious, honest and useful citizens.

By the use of this treatment we can eliminate and cause a distaste for alcoholic beverages, build up the nervous system, repair the brain, heart, kidneys, liver, stomach and intestines, placing the body in a condition where nature can come to the rescue.

The patient looks and feels like a different being and is as free from the desire for strong drink as a new-born child, beginning life over again upon a firmer foundation.

The passage from the Holy Bible that, "No drunkard shall enter the kingdom of Heaven," should alone be incentive enough to induce a physician to delve into the mysteries of this unfortunate addiction, using the means and brains God has given us to restore our unfortunate fellow men to the manhood with which God has endowed them. I hope this article may stimulate a greater interest in these men.

OPTIMISM VS. PESSIMISM

Forceful statements of essential fact looking to greater therapeutic progress. A personal letter of appreciation of our journal and our work, printed by permission

By GEORGE F. BUTLER, M. D., Chicago, Illinois

Author of Butler's Materia Medica, Therapeutics and Pharmacology; Professor of Therapeutics and Clinical Medicine, American College of Medicine and Surgery.

DEAR DOCTOR ABBOTT:—I write to you to compliment you upon the steady and marked improvement in THE AMERICAN JOURNAL OF CLINICAL MEDICINE.

I am a subscriber to over fifty medical journals, and in my opinion your journal should be more helpful to the practising physician (not the theoretical, laboratory doctor, but the bedside doctor who is actually and actively engaged in treating sick people) than any other that comes to my hands.

The whole tone of THE AMERICAN JOURNAL OF CLINICAL MEDICINE is so optimistic, so full of helpful hints and common sense, rational therapeutic suggestions, that I cannot refrain from publicly complimenting you upon the excellent work you are doing.

The Optimistic Doctor Will Succeed Best

I hope that you will continue to fill your pages with your irresistible optimism. The doctor who is cheerful and optimistic and who has learned to give Nature a chance, and not drug his patients with ill-smelling, bad-tasting, polypharmacal mixtures, will succeed better in the treatment of the sick than the cold-blooded, pessimistic, materialistic physician, even though he possess the diagnostic acumen of a Virchow, a Von Noorden or an Osler.

The doctor who brings confidence and good cheer into a sick-room sweeps the air with a breath of health from "Youth's eternal morning, stirring among the roses."

The hopefulness and optimism of the physician do far more than cure feeble minds and faltering wills. They assist the cure of every disease he encounters. His very cocksureness (to use a favorite expression of a well-known specialist, "I am not only sure, I am cocksure") and especially his cheerfulness and optimism, produce a confidence and belief in his powers that cure quite as much as anything that we may use.

Alteratives and tonics for the mind are often as important and efficacious as alteratives and tonics for the body.

Dr. Oliver Wendell Holmes said: "A smile may be worth $5,000 a year to a man." It is often worth that to a doctor and is often of incalculable value to a despondent patient.

Give the Patient the Full Benefit of Hope

Other things being equal, the best physician is he who inspires the most hope. The patient should receive the full benefit of hope. If he be a man cast in the common mold as regards love of life and dread of death, expressions must never be given to our fears in any form. The bare suggestion of death to such a man may turn the scale against his recovery. Fear being recognized as a powerful cause of disease, and a direct and great obstacle to recovery, a wise physician will exert himself to prevent or antidote its influence. To eradicate fear and stimulate hope is to help avert disease, to shorten its duration, diminish its virulence and promote recovery. There is a mental and moral sanitation ahead of us, which is perhaps as valuable and desirable as are our quarantines, inventions, experimentations and all microscopic search for physical causes.

Right here, I wish to quote a portion of an article I contributed to the July, 1906, number of the *Chicago Clinic*, as being peculiarly apropos: "Fear in itself is a contagious disease, and is sometimes reflected from one to another with great rapidity. It needs no speech or sign to propagate it, for, by psychological laws we are just beginning to comprehend, it passes from one to another, from the healthy to the sick, from the doctor or the nurse to the patient, from the mother to the child. This malignant influence may be cast about us by even our best friends and would-be helpers, under whose baleful shadow, without our even knowing of its existence, we and our children may sicken and die."

How much more serious is the effect upon the public mind when eminent physicians are pessimistic and say that nothing can be done in the way of treatment for the great majority of acute and chronic diseases!

Hope Even for the Incurable

My lay friends (if any such should read this), if some theoretical doctor or surgeon, afflicted with therapeutic nihilism and who can see nothing outside the field under his microscope or what is directly under his scalpel, has pronounced your doom and told you that you are the victim of incurable organic disease, because he has detected some signs or symptoms of Bright's disease, or locomotor ataxia, or organic disease of the heart, or that you have pneumonia, don't worry; but with greater care than ever, adjust yourself and your work. Be cheerful, hopeful, optimistic; and remember that your vital organs, like every other machine, even if crippled, by judicious living and management may be made to do good work for half a century. All organic chronic diseases, as well as the acute diseases, are amenable to treatment, management, and in many cases even to cure, unless their victims become pessimists by falling into the hands of pessimistic and over-trained physicians, who ought to have been funeral directors rather than doctors.

Some physicians are so scientific that they care for nothing but to make a diagnosis. They do not believe in the efficacy of medical treatment. These therapeutic nihilists have done an immense amount of harm by their pessimistic statements regarding the treatment of disease. Who can calculate the harm that has been done by the public statement of a prominent Chicago surgeon regarding the futility of treatment of pneumonia? His surgical standing in the profession (he is in no sense a therapeutist) added weight to his words. The newspapers all over the country took it up and printed in large headlines: "*There is no treatment for Pneumonia!*" and even in a popular magazine there appeared an article entitled: "Pneumonia the Killer—An Unsolved Problem!" The article started off with this paragraph:

False and Fear-Producing Statements Concerning Pneumonia

"Pneumonia—an unsolved terror, a growing menace to the life of our great cities, an enemy that promises to be science's greatest foe in the twentieth century"—and closes with the hopeless statement

that "there is no treatment," and, to clinch it, as it were, quoted the words of the Chicago surgeon: "Drug treatment is useless in cases of pneumonia. The medical profession, so far as medicines are concerned, can be of no assistance in the fight against this disease." That absolutely is not so! and the pessimistic allegation has caused, is causing, and will cause, the death of thousands at the hands of blind followers of "Authority." The sentiment that tears down and cannot build a better had best not be expressed.

Such a statement, even if it were true, should not have been made. It is altogether probable that many people afflicted with pneumonia have died from fright. You take hope away from a patient and he hasn't much to stand on. Through the utterances of pessimistic doctors and sensational literature, pneumonia has become a synonym for fatality. The impression is widely spread that there is no cure, no help for pneumonia. This opinion is encouraged by surgeons who believe they can see *profit financially* by disparaging therapeutics.

Where Accurate Diagnosis Makes a Difference

In estimating the alleged increase in fatality or number of cases of any disease, the enormously increased powers of diagnosis and specialization must be taken into account. The people, for example, believe that appendicitis is a new disease of the last thirty years. With the increase of appendicitis has come a decrease in "inflammation of the bowels," and that term had a depressing effect upon the person attacked, much greater than the term appendicitis has now. When pneumonia was called "inflammation of the lungs," and was treated as inflammation used to be, recoveries were expected and patients rallied from apparently severe conditions much oftener than they do now, when the surgically inclined practician does nothing to help the patient, and when the term "pneumonia" deals this patient a mental death-blow.

In pneumonia, as in all other diseases, there is no "cure." This is a half-truth born in quackery. No physician worthy of the name ever treats a disease or attempts to cure *it*. He treats the patient, who is a compound of his ancestors, of the surroundings of his childhood and youth, and of the particular period at which he is exposed to disease-producing influences.

"Bevanized" Surgeons and "Oslerized" Doctors

The "Bevanized" surgeon and the "Oslerized" doctors tell us that acute diseases are self-limiting, and it is useless to do anything for patients suffering with these affections; for in a given length of time nature will restore them, or pass them on to a better world; and for chronic, organic diseases, particularly nervous diseases, of course nothing can be done! We must resign ourselves to fate unless we can be cured by surgery—and there we are! Cheerful, isn't it? It behooves every one who is ill to have some affection amenable to surgery; then there may be some hope for him!

Well, to my mind, and in the trite words of another, "it's better not to know so many things than to know so many that aint so!" A doctor who really knows how, can do something for his patients—can, on an average, secure as good proportionate results with his patients as the most able, modernized surgeons are able to secure with theirs. Why should they deny to therapeutics the possibility of progress? Why judge us by the therapeutic standards of not so long ago, when dear surgery was a matter of the barber's pole, the pitch pot, laudable pus, the carpenter's saw and the butcher's knife. May not we too progress? The therapeutist approves of and supports the surgeon. Why does the surgeon, arrogating to himself all knowledge, seek to impede our progress, to belittle our efforts, our accomplishments, and persistently misrepresent us to the public at large.

The American Journal of Clinical Medicine is teaching optimism in medicine, as well as the value of good thera-

peutics. Despite the statements of pessimistic nihilism, therapeutics is really the keystone of the arch upon which the whole superstructure of medicine rests; for the ultimate aim of all medical research is the treatment and prevention of disease. It is eminently desirable that a medical man should be, not only a good diagnostician, but a skilful practician. It is quite possible to be the one without being the other. The combination is greatly to be desired. The tendency of modern medical teaching has been rather to produce the first, leaving the second quality to develop itself, or to remain in a condition of imperfect evolution.

We Are Measured by Our Usefulness

The public cannot be expected to estimate us by any other measure than that of our usefulness. It is all very well for a patient to feel that his medical man is carefully trained in physical examination and capable of constructing a skilful diagnosis; but the essential thing after all is confidence in his power to aid him, when stricken and prostrated by disease or accident. The latter is our actual business and occupation in life; and it is here that success is most to be desired.

Your publication is doing a valuable work in stimulating an interest in therapeutics—in the use of active, reliable and dependable remedies. In a way you are a leader in these matters, and like every one who attempts to lead people out of the old ruts you have bitter opponents. While I have always tried to be liberal and open to conviction, the old-fashioned habit of prescribing old-fashioned remedies in the old way has been hard to overcome; but I wish to say here, openly and honestly, that I am convinced you have hold of the rope that will come nearer leading the profession out of the darkness and uncertainty of drug-therapy than anyone else.

Much of the advance of knowledge lies in the capacity of one generation to benefit by the experience of its predecessor, in the power to appropriate the information gathered by those who have gone before us; knowledge which we in our time should leave elaborated and enlarged to those who shall come after us. Medicine, especially in the realm of therapeutics, is no exception to this rule. A man should not only learn for himself, but he should gather and garner for his successors.

I, for one, am willing to recognize and profit by a good thing when I am convinced that it is good, and to discard the old for something better, when I am convinced there is something better.

When I wrote my text-book on "Materia Medica, Therapeutics and Pharmacology," I thought it was pretty good; and I think that it is equal to the average text-book on this subject yet. But I now know that much of the matter therein is obsolete and old-fashioned, and it is my ambition to live long enough to write a book on Materia Medica and Therapeutics more in accord with my present knowledge, and more in accord with active medication.

The Reason for the Opposition

Every now and then I see sporadic manifestations of opposition to your work and to you, prompted, I believe, by envy and jealousy; but you must expect that. It is not so much because of what you have done but because *you*, *not they*, have done it! The movement you have so ably fostered has got to go, *is* going with irresistible momentum right now. Be encouraged. Keep up the fight! Remember people don't throw clubs at the apples on the low branches. Go on advocating what you believe to be right (and I believe in the main you *are* right), and rest assured that truth will ultimately prevail. Whatever is true and of value in your doctrines, you may rest assured will be recognized and adopted by the majority of medical men, and what is not will be discarded; and if you are the man I believe you to be, that only is what you want or expect.

—:o:—

Good for you Brother Doctor! Hang to the rope and call in the wanderers! The rope is strong, the way is true! We cannot see the end but we feel the anchorage

to be secure. We know that the success city for therapeutics will be just what we build it.

You have kindly given us credit for accomplishment—for doing something, at least for trying to put courage into the heart of the doctor, that he may better appreciate and more successfully use the progress-facts placed before him. Thank you! That which you accuse us of is exactly what we are trying hard to do (Office, 2:30 a. m., March 2, 1907—a sample of over twenty years of try!) Enemies—opposers? Yes! Splendid ones! What a strength they will be when they get on the right side!

Discouraged? Never! No man is licked till he is dead or gives up, and I am neither! In fact, the great environment of support gathering to the standard of a better therapy, has so effectually crowded the kickers and knockers into peripheral distance, that their vituperation has been lost; and they will soon disappear over the horizon line, to come back the other way, good fellows. —"Going some?" Drop in and see.— W. C. A.

ACONITINE - AMORPHOUS*

A condensed resume of the utilities of aconitine, with special reference to certain unusual but effective applications of this useful remedy

By WALLACE C. ABBOTT, M. D., Chicago, Illinois

A CORRESPONDENT inquires whether aconitine can be the cause of an eruption on the skin. In the case in question a patient had taken three granules of aconitine every two hours during a period of high fever. This was followed by an eruption over the body, the form of which is not described, but probably an erythema. We at first replied that aconitine did not cause the eruption, but there is the fact that the eruption did follow the use of this remedy. Further correspondence developed the fact that the patient was extremely autotoxemic, with a densely loaded colon. The sequel is interesting.

Aconitine, when locally applied, first stimulates the sensory nerve ends, later paralysing tactile pain and special sensation. It especially affects the fifth cranial nerve. It does not directly affect motor nerves. It stimulates the vasomotor center, depressing it later, but does not affect either the trunks or terminals of the nerves. Arterial tension is lowered and the arteries contain less blood.

The Most Important Function of Aconitine

The most important function of aconitine is that of stimulating the vagus inhibitory center. By this the heart is slowed, diastole prolonged, and more blood is forced out by each systole. The respiratory center is depressed, breathing slowed, expiration is labored, and after fatal doses death is due to asphyxia. The saliva and perspiration are increased. As to other secretions the effect is uncertain. Aconitine is largely excreted by the kidneys.

This brief synopsis gives the clue to the therapeutic application of aconitine. Its power of slowing the pulse, while it actually increases the work done by each contraction of the ventricles, renders it of especial value in fevers. By relaxing the arterial coats it lightens the labor of the heart, and allows the blood to flow out of hyperemic areas. The addition of digitalin increases the tonic action upon the heart.

* An exhaustive treatise on aconitine, along with all the other most essential active principles (a condensation of all available information up to date) will be found in the W-A Alkaloidal Therapeutics, procurable of The Clinic Publishing Company. Price $2.50, postpaid, cash with order. Money back if not satisfied.

The writer's clinical observations have impressed him with the belief that digitalin possesses, in some degree, the power of increasing the elastic contractility of the capillaries and veins. Frequently when ergotin has been given for hemorrhages until the limit of its effectiveness has been reached, a little hemorrhage still remains, when this was also stopped by the addition of digitalin. These characteristics render the union of aconitine and digitalin of a special value in the treatment of fevers as a routine procedure. The writer has administered this combination many thousands of times, all his experience confirming him in the conviction that so far as any antagonistic action of these two remedies is concerned each exerts its powers on that portion of the human organism which requires such action to restore it to normal circulatory conditions.

Fecal Absorption and Vascular Relaxation

The clinical observer, who has learned to appreciate the conditions resulting from the retention of feces in the alimentary canal, finds many phenomena explicable in this manner. Take for instance the aggravation of symptoms following the administration of a cathartic. A superficial observer would say that this contradicted the theory by which the phenomena were ascribed to fecal toxemia. Nevertheless, it is perfectly evident that the liquefaction of fecal masses is apt to be followed by freer absorption than could positively occur from a dry mass. In like manner, the relaxation of vascular tension by aconitine, would permit a freer traversing of the blood vessels by toxic elements.

It is exactly for this reason that we so frequently accompany remedies for which we desire speedy effects by a dose of glonoin.

The occurrence of the eruption in the case reported is therefore quite comprehensible, and this view is confirmed by the speedy relief (the prompt disappearance of the eruption and the subsidence of all disagreeable symptoms) following the evacuation and disinfection of the alimentary canal.

Aconitine as a Gastric Sedative

The writer desires further to call attention to the efficacy of aconitine when nausea is present from irritation of the stomach. Here we utilize the sedative powers of aconitine over the peripheral terminations of the sensory nerves. Empty the stomach and then administer the aconitine in granules or concentrated solution (preferably in granules to protect the mouth) and the effect will be gratifying.

The field covered by aconitine is very large. Few remedies in my granule case require such constant replenishing as this. When one comes to know this priceless remedy well its applications multiply. We doubt if there is a single remedy in the list with which the physician can more wisely render himself familiar. We have never had an accident from its use.

The amorphous aconitine to which we give preference, has proved remarkably uniform in its action. It has never varied perceptibly during the many years we have made use of it. The safety of the drug is evidenced by the enormous distance between the effective therapeutic dose and the dangerous toxic dose, for while from three to ten granules, each containing gr. 1-134, suffice to produce the desired effect, in the vast majority of instances, when properly administered, the maximum daily dose for the average adult is placed at one grain; this however should not lead us to carelessness in the use of this drug—in fact it is really no guide at all.

Reasons for Difficulties and Failures

The difficulties and failures with aconitine arise from neglect of the proper preliminaries. It is one of the best and surest remedies we possess. The bowels should always be emptied and disinfected, after which aconitine should be given. When a fever resists the ordinary use of the medicament there is either some obstacle which should be removed, or veratrine is also indicated to increase the action of aconitine and further open the doors of elimination.

All fevers, all congestions, and most pains (neuralgias, etc.) are amenable to

aconitine properly supported by other indicated medicaments, such as hyoscyamine, veratrine, digitalin and strychnine; but *must* be associated, for best results, with thorough elimination—a thorough clearing of the toxin-loaded liver, as the essential blood filter of the body, with a good and repeated flushing and disinfection of the alimentary canal to limit toxin absorption therefrom — the "clean out, clean up and keep clean" doctrine of which you have heard so much.

THIS IS JUST A REMINDER

A troublesome case of "rheumatism" which did not yield to treatment. Telling how this case cleared up when an accurate diagnosis was at last made

By S. E. GRIGGS, A. B., M. D., Seattle, Washington

WE easily recognize the symptoms of a common ailment when it presents itself in a familiar form. But when it comes in disguise or mayhap, which is not altogether unusual, in the guise of a fellow imp, unless we stop to think we may sometimes be deceived. To explain, let me relate a case I have recently had in the hospital. It may possibly help some other young physician to remember the things we used to recite in the schoolroom and forget as quickly as we got out.

A Case of "Rheumatism"

Mr. W——, age 48, a coal miner, nationality German, was sent in to my office from the country. He was complaining of rheumatism.

I went over the case with about the ordinary care but, on account of his poor English, history and symptoms were very difficult to get. As nearly as I could find out, however, the present attack dated back about eight weeks to some wet work in the mines, during which time he had been about the house, some days confined to bed and some days up and around, sleeping rather poorly but eating well. He had been treated by several other physicians for rheumatism and came to me with that diagnosis. He had had drenching sweats, with fever and pain shifting about from chest to bowels and from hips to shoulders, also sometimes a numbness about the feet and legs.

The physical signs appeared quite plain. They showed a large man, well nourished, perhaps a little portly, with a gouty, anemic appearance. The tongue was pale and flabby. The feet and hands showed the marks of profuse perspiration. The skin was wet and clammy. The lungs were normal, the heart apparently so, with marked acceleration upon slight exertion. The urine was acid and loaded with urates.

A more complete symptomatology was difficult to get. And the patient desired to return the same day. I did not want to overworry my gray cells, so I went no farther into the case but diagnosed rheumatism, a very common malady here, put him on the salicylates, 15-grain doses six times a day, with a saline purge each morning, gave him a diet list and let him go back home with instructions to write to me.

The Salicylates Fail to do the Work

In five days things had not improved a bit. I scratched my head and increased the dose, running the salicylates up to 2 drams in twenty-four hours. In five more days, with five more letters, I saw very plainly that the case was not yielding to treatment. So I changed him on to the alkaline therapy, giving him potassium carbonate with a vegetable acid and a

tonic, iron, quinine and strychnine, night and morning. After a fair trial this gave no better results. Then minding the old motto, "Trust in God and keep your bowels open," I tried some proprietary rheumatic cures. These also proved failures, probably because he lacked the first premise of the motto.

By this time I was getting a little discouraged with the healing power of drugs in rheumatic cases, and I guess the patient was more so. But I wrote him that it was unsatisfactory to treat him through the mail and that he would have to come into town and go to the hospital for a while.

He came in, looking about the same after all this treatment or maltreatment, whichever you might call it. I was not over enthusiastic on his coming, but felt much like I was holding a bob-tailed flush; still I started to re-examine the case.

What the Blood Count Showed

His symptoms were the same. His temperature as on the previous occasion was normal. All the physical signs, and this time I went over them very carefully, were the same with the exception that I made a blood count and found:

Erythrocytes 4,100,000
Leucocytes 10,000
Hemoglobin .....70 per cent

I also found abundant pigment deposits and something which I thought looked like a plasmodium. I then tried to get more history from the patient and, after much quizzing, and signs, I found that about seven years ago he had had what he called "the shakes" down in southern Arizona, but had been cured.

I began to be interested and sent him to the hospital, ordered an alum sponge bath, with light diet and put him on grs. 15 of quinine daily, with Fowler's solution, 2 minims thrice daily, increasing 3 minims each day up to 8 minims. I also gave him a good dose of black draught each morning. The sweating stopped immediately and all pain had disappeared on the second day. I kept him there ten days with no return of the symptoms. And then with a very wise look I collected the remainder of my fee, gave him a pocket full of quinine and a beer-bottle of black draught and sent him back to the mines.

THE TREATMENT OF PNEUMONIA

A digest of the methods of the past and present, and a brief outline of the mode of treatment which the author finds most successful. Read before the Second District Iowa Medical Society

By E. H. KING, M. D., Muscatine, Iowa

TO outline intelligently the therapeutics of any disease, the pathology, and to some extent, at least, the etiology must be taken into consideration. There is no malady that afflicts the human family, which covers a broader pathological field than pneumonia and its compliations.

Primarily and simply considered, it suggests an inflammation of pulmonary tissue, with its various stages of congestion, consolidation from fibrinous exudate, forming the so-called red and gray hepatization, and, in favorable cases, followed by resolution and restoration to health; but the affection is so modified or controlled by the physical status of the patient, age, environment, preceding or accompanying diseases as well as numerous other complications that may and often do arise during the course of the disease, that it is obvious that no simple, specific plan of treatment can be proposed to be followed in all cases.

Pneumonia Not "Lung Fever"

The old theory that lobar pneumonia was simply an inflammation of the lung, and was to be treated like all active phlegmasiæ by vigorous antiphlogistic measures, has gradually given away to the conviction that it is an acute, general, specific disease, of which the local lesion is but a characteristic manifestation. Previous to the time of Laennec (1816) two other conditions were included under the name of pneumonia, viz., pleurisy and bronchitis, and generally known to the English-speaking people as lung fever; but when the principles of auscultation and percussion became known, the profession was enabled to differentiate between the local lesions within the chest. We now have two varieties of the affection under the general term of pneumonia, essentially two distinct diseases, arising from different causes, requiring different treatment, but having a common lesion of the lungs.

Whether lobar pneumonia is of bacterial origin, and therefore infectious, also whether it is contagious, is still *sub judice*, though many eminent observers and investigators maintain the affirmative in both instances. In reviewing the therapy of the disease as practised previous to the middle of the last century, we find that it was based upon the theory that it was a local inflammation, and the antiphlogistic plan of treating all inflammations naturally followed, and the routine practice is tersely stated to have been, to bleed, purge and blister.

How Sir Thomas Watson Treated Pneumonia

Watson, whose lectures on the practice of physic were delivered in King's College in 1836-37, and published in book form in 1843, became the standard in England and America. He advised venesection, followed by antimony and blisters; yet it must not be inferred that he advocated indiscriminate bleeding; on the contrary, it was only in the first, or stage of engorgement, and then only in vigorous and robust subjects, that it was permissible. In the second stage, tartar emetic, and later, mercury was given; the latter in small doses, guarded by opium and pushed until systemic effects were obtained, as shown by tender gums and mild ptyalism. In case of failing strength, carbonate of ammonia, wine and nutritious diet was advised. He differed from his predecessors in not advocating active purgation, and recognized the importance of conserving the patient's strength.

Already in Watson's time a reaction had set in against bloodletting, not only by the homeopathic school, but also by many prominent regular physicians. Louis in France, had taught that bleeding had but little control over the progress or issue of pneumonia in any of its forms, and Hughes Bennett of Edinburgh, maintained that antiphlogistic remedies in general, and bloodletting in particular, were unsuitable and even harmful in all acute inflammations.

Methods of George B. Wood

Our own George B. Wood, whose work on practice appeared in 1847, and who rapidly became a favorite among American practitioners, based his treatment of pneumonia on old antiphlogistic lines. Yet he cautioned against routine measures and says: "In no disease is it more important to make proper discrimination in the treatment; the measures that are salutary and even essential under certain circumstances, are injurious and even fatal in others"—advice that many modern, aggressive practicians would do well to heed. In proper cases he advises bleeding in the first stage of the disease and says: "In persons of a vigorous constitution, bleeding is the most efficient remedy; no disease bears the loss of blood better than open, well-developed pneumonia."

The bleeding was to be followed by free purgation with calomel, jalap, c. c. pills or castor oil. In the second stage, tartar emetic and ipecac in non-emetic doses; if the case does not improve, mercury to mild salivation is given, and large blisters applied. In debilitated patients these remedies are not applicable, but supporting

measures to keep up the patient's strength are advised, in which he does not differ from the practice of today.

The Swing of the Pendulum Toward Conservatism

The next authority to be considered is Austin Flint, whose work on Practice appeared in 1866. By this time the antagonism against venesection had become so widespread and intense, that it was only used by old practicians, or only in exceptional cases. The pendulum had swung to the other extreme, and as it had been discovered that certain general diseases, including pneumonia, were self-limited and would recover with no or in spite of any treatment. A Fabian policy of expectancy was the result, from which the therapeutic nihilism of today has been evolved. Flint's conservatism is in strong contrast to the aggressive therapy of his predecessors, and he made a deep and controlling impression upon the practice of medicine in America, which is still felt to a considerable degree.

He is skeptical of old measures and says, "Experiments have abundantly shown that these measures, viz., antiphlogistics, are not to be relied upon for the arrest of this more than other inflammations," but admits that bloodletting is permissible in certain cases as a palliative, and perhaps to some extent, a curative measure, in view of the promptness of its action," but adds: "The same result can be secured by depletion by means of saline purgatives and sedatives, such as tartar emetic and veratrum viride, or in case of feebleness of the circulation, aconite."

Flint taught that in the second stage "all medicine is of doubtful value," and to support the powers of life was the general indication.

As supporting measures he advises alcohol, quinine, and nutritious diet. And to promote absorption of the exudate, tincture of iodine externally. He further states: "In mild, uncomplicated cases there is little or no intrinsic tendency to a fatal termination, and patients pass through the disease satisfactorily under simple, palliative treatment."

Modern Methods of Treatment

Coming to more recent times we will consider the treatment as advocated by prominent authorities, among whom Anders, Hare, Loomis, Bartholow, Tyson and Osler will be recognized as representative exponents of the modern treatment of the disease.

Anders classes lobar pneumonia among the infectious diseases. As to abortive treatment, he cites the plan of Petresco, who uses large doses of digatalis in infusion, administered at the onset to jugulate the disease, and who had the low mortality in 1192 cases of 2.66 per cent. Anders states that the plan is rational, but adds that in the few cases that he has tried it, it failed to cut short the disease, though they terminated favorably.

He regards venesection as a good measure in sthenic cases, the temperature falling, pain, dyspnea and nervous symptoms being relieved, and the pulse softened. In the late stages bleeding rarely yields good results. He regards the antiseptic method as being based upon etiological indications, and as most rational. The best antiseptics are carbolic acid, thymol and mercuric chloride. He says of the general management: "As pneumonia is a self-limited disease, the principal object is to support the powers of life until the crisis is passed. To this end nothing contributes so much as proper feeding." As cardiac stimulants, he uses alcohol, strychnine, nitroglycerin, and preparations of ammonia; oxygen in respiratory failure with cyanosis, and hydrotherapy to reduce temperature. In hyperpyrexia, acetanilid or phenacetin. Like cardiac sedatives, antipyretics should be used sparingly, and effects carefully noted; veratrum viride produces a good effect upon the local conditions, since it relaxes the arterial walls and bleeds the patient into his own vessels; but, since it is a cardiac depressant, it is questionable whether its disadvantages do not outweigh its advantages. Aconite should not be used.

Opiates may be used to relieve pain and cough.

In catarrhal pneumonia, reduce temperature by hydrotherapy, stimulate the heart with alcohol and strychnine, and control the circulation with veratrum or aconite. Give free ventilation and maintain strength by feeding.

Other Methods Suggested by Modern Authors

Graham, in Hare's Therapeutics, recommends the expectant plan and avoids all measures that will depress the heart. In protracted cases he uses stimulants, tonics and nourishment, free ventilation, blisters to the chest, ammonium iodide and cod-liver oil. Condemns blood-letting and tartar emetic, also blisters in the early stage. Has little faith in abortive treatment and says: "Uncomplicated pneumonia requires in robust subjects, little or no treatment," yet admits that "quinine given early in the disease, during hyperpyrexia, has seemed to be of more than temporary benefit."

Catarrhal pneumonia, being a local disease, cannot be aborted, therefore, expectant and supportive treatment is advised.

Loomis classes lobar pneumonia as an acute, general disease, with a characteristic local lesion. Uncomplicated and at certain times of life spontaneous recovery occurs, with complications, and at certain ages and under certain conditions it is almost necessarily fatal. He condemns bleeding, veratrum, antimony, calomel, and all so-called cardiac sedatives. Advises free ventilation, rest, and a nutritious and well-regulated diet. Allows blisters and counterirritation in the third stage only, to hasten resolution; dry cups to chest relieve dyspnea and dispel edema. Supports heart with alcohol and reduces temperature with quinine, 10 to 20 grains, and does not favor local applications of cold. The cotton jacket is grateful to patient and favors diaphoresis.

Catarrhal pneumonia, being of different pathology and etiology, is always secondary, and has a high mortality among children and the debilitated. Avoids all depressing remedies, advises a nutritious diet, and as a rule, gives alcohol from the first; uses quinine to reduce temperature and combat asthenia, giving 10 to 20 grains daily to a child three years old; advises emetic doses of ipecac to free bronchi from mucus. "Under no circumstances is opium to be given."

Bartholow, in lobar pneumonia, advises expectant treatment, and says: "As we have to deal with a self-limited disease, which terminates by crisis between the fifth and eighth day in 60 per cent of cases, and as we possess no specific, it is plainly our duty not to interfere too zealously in natural processes, and defeat by our injudicious handling a favorable termination." If seen in the beginning, he believes that much may be accomplished by a full dose of quinine, 20 grains, and morphine, 1-2 grain. Advises application of cups and leeches to chest, aconite or veratrum, with poultices to chest, followed by purgatives, which seems to be rather active treatment for a purely expectant plan. In catarrhal pneumonia he uses preparations of ammonia to lessen the viscidity of the exudate and favor its excretion. For high temperature, quinine and digitalis.

Osler's View of Pneumonia

Osler defines lobar pneumonia as an infective disease, characterized by inflammation of the lungs, toxemia of varying intensity, and a fever that terminates abruptly by crisis; secondary infective processes are common. The micrococcus of Fraenkel is present in a large proportion of cases. The most fatal of all acute diseases, killing more than diphtheria, and ranking next to consumption as a cause of death.

"It is a self-limited disease, which can neither be aborted or cut short by any known means at our command."

"There is no specific treatment for pneumonia. The young practitioner may bear in mind that patients are more often damaged than helped by the promiscuous drugging which is still too often prevalent."

Of the remedies believed to be of benefit in this disease, he says: "To bleed at the very onset in robust, healthy individuals, in whom the disease sets in with great intensity and high fever, is, I believe, good practice. I have seen instances in which it was very beneficial in relieving pain and dyspnea, reducing the temperature and allaying the cerebral symptoms." He mentions veratrum as being credited with the power of reducing the intensity and shortening the duration of the attack. Discredits tartar emetic, and notes Petresco's use of digitalis. For pain uses opiates, and hot or cold applications. Has no specific to combat toxemia, but uses measures to keep up the patient's strength. Advises alcohol, strychnine, and digitalis for cardiac weakness; is doubtful whether oxygen inhalations are ever beneficial. Does not favor the term "catarrhal" as applied to bronchopneumonia. Advises free ventilation, free action of bowels, and spiritus Mindereri with aromatic spirit of ammonia, and aconite for fever, opiates, used with discretion, for pain and distressing cough; nutritious diet, alcohol and strychnine as needed to sustain the heart's action.

Tyson defines lobar pneumonia as "an acute, infectious disease of the lungs, characterized by high fever, and terminating by crisis in from five to nine days." "The diplococcus is commonly regarded as its cause." He calls it "a treacherous and uncertain disease at any age." For treatment he says: "Undoubtedly cases occur which are best treated by bloodletting, while many more do not need it, and a few are harmed by it." As indications for bleeding: "They are found, as a rule, only in the first stage and the first part of the second stage, and include, first, great dyspnea, second, a full, bounding pulse, and third, sharp, pleuritic pain. The relief to all of these symptoms is often magical." "Bleeding, besides relieving the symptoms referred to, hastens the crisis and shortens the disease."

He recommends opiates, in form of morphine or Dover's powder, for pain or cough, chloride or carbonate of ammonia as expectorants, and alcohol, often from the first, in adynamic cases. Digitalis is often a useful remedy, but is as often injudiciously used. Oxygen inhalations are of advantage in relieving dyspnea and comforting the patient. Hyperpyrexia is relieved by cold sponging or ice-cold applications. Blisters sometimes do good, especially in delayed resolution. In mild cases, turpentine stupes may be sufficient to relieve pain. Though a self-limited disease, its fury may be diminished and crisis hastened by treatment. Of veratrum in the early stages instead of bleeding he says, "I have never felt comfortable when relying upon it."

In bronchopneumonia, restorative measures are called for from the onset. Bloodletting is not called for, aconite is valuable if the temperature is high and pulse full and rapid. Alcohol, strychnine and nutritious diet, with cotton jacket, or poultices for children.

The Complications of Pneumonia

Thus it is seen, that while there is a great diversity of opinion as to the effect of the various remedies used, yet the trend of modern opinion is shown to be, that as mild, uncomplicated pneumonia is a disease which is self-limited, active medication is uncalled for, and attempts to abort the attack do not meet with *much* favor. But it has been the experience of every practician of extended practice, that complications frequently do occur, and the mortality is correspondingly high, and it is these frequent complications that tax the skill and ingenuity of the practician, to conduct such cases of the disease to a favorable termination.

As a complication pleurisy is the most frequent in occurrence, and in but very few cases is it found to be entirely absent. The pain varies, and often it will be out of all proportion to the amount of lung tissue involved or to the severity of the attack. Sometimes considerable effusion will be found, of which active symptoms have given but little warning of this condition. Next to pleurisy, peri- and endo-

carditis occur, and in catarrhal pneumonia, especially in children, gastrointestinal catarrh will occasionally be present and nephritis is sometimes a sequel. Alcoholics are especially liable to the asthenic form of the disease, as are also broken-down and debilitated individuals. Occasionally epidemics of pneumonia occur, in a low, asthenic type, to which the name of typhoid has been applied. Extremes of age are bad subjects, as are also the residents under unsanitary conditions. These complications and conditions, render the disease one of great gravity and the treatment must vary accordingly.

A Resume of Remedies

As a resume of remedies we will consider bloodletting, a measure now seldom used; in fact, the prejudice against bleeding is yet so great, that few of the younger physicians have the moral courage to use the lancet in this or any other affection. It is admissible only in the first stage of the disease, and then only in robust patients, with full, hard pulse, and high temperature, especially if the right heart be over-distended, in which case the relief from dyspnea is marked. It is doubtful if it is of any value in aborting the disease.

Veratrum viride has been extolled as an abortive, especially by the opponents of venesection. As a rule it is applicable to the same conditions that would admit of the latter measure. In sthenic cases, with full, bounding pulse, it is given to slow the heart's action, relax the arterial tension, and as expressed by its advocates, "to bleed the patient into his own veins." H. C. Wood, says of veratrum: "When true, strong arterial excitement is to be controlled in any disease (except it be gastritis), veratrum viride may be employed as a prompt, thoroughly efficient, and at the same time, very safe remedy—very safe, since it is almost impossible of producing death in the robust adult, unless used with great recklessness and in repeated doses. In the early stages of sthenic pneumonia it offers, I believe, the best-known method of reducing the pulse-rate and temperature and of ameliorating the disease." When given to effect, diaphoresis ensues, nervous symptoms subside, and from many years' use of the remedy, I greatly favor its employment in these conditions. I know of no remedy that will give more decided and certain results, or whose action is under better control. The nausea and apparent prostration caused by full doses, is promptly relieved by an opiate and a few small doses of alcohol.

The Use of Defervescents

Aconite and digitalis are in favor in some cases. Petresco's experience has already been noted. It is the more applicable in the later stages of the disease, and when used in conjunction with strychnine as a cardiac tonic. Veratrum, aconite and digitalis may be advantageously combined with spirit of niter and a saline, to promote elimination by diuresis. [The really ideal way to use these three powerful drugs is, of course, in the alkaloidal form—the defervescent compound—substituting strychnine arsenate for veratrine in asthenic cases.—Ed.]

Hydrotherapy is highly recommended by Niemeyer, Jacobi, Chapin, Baruch, Mays and many others. In hyperpyrexia it may be applied with cold compresses or by means of the cold pack, ice bags or the cold bath as used in typhoid. It is obvious, that in private practice the bath is only occasionally practicable. Cold applications undoubtedly reduce temperature, act as a cardiac tonic and relieve nervous symptoms. Ice-cold applications are recommended by Niemeyer and others for pain.

In view of the bacterial infection as a cause of the disease, it has been proposed to treat it on the antiseptic plan, and carbolic acid, thymol, salicylic acid, mercuric chloride and guaiacol have been used with varying results, which have not been definite enough to establish its value or to commend the method. [They are all valuable as intestinal antiseptics in pneumonia—but inferior to the sulphocarbolates.—Ed.]

The use of quinine in large doses has been highly advocated for many years, as having a decided effect in limiting and even aborting the disease. Thirty to thirty-five

years ago, in the early years of my practice, it was the routine practice in this section. As malaria was a factor in many, if not all, acute diseases, it was undoubtedly a good measure. Later it fell into disuse, but I see in the medical journals of late, it is being again strongly advocated. [Galbraith recommends enormous doses.—Ed.]

I have used it with benefit, yet I do not regard it in the light of a specific, but that it acts as a general tonic, supporting the vital powers, limiting the ameboid movement of leucocytes, promoting leucocytosis and combating toxemia, at the same time acting as an antipyretic.

Strychnine and alcohol are remedies almost universally used as cardiac tonics and stimulants, and in connection with nutritious diet are of value in supporting the vital forces. Free ventilation and fresh air are of the utmost importance in treating pneumonia. In my personal experience during an attack, several years ago, I had my bed beside an open window, and the cold winter air relieved the dyspnea and was very grateful and refreshing.

Free purgation was almost universally resorted to by older practicians. A dose of calomel at the onset, followed by salines thoroughly to clean out the bowels, to remove present and prevent future fermentation and its consequent toxemia, is good and desirable practice. Free evacuations should be maintained daily, and an aid to intestinal disinfection may be attempted by the use of the sulphocarbolates.

The Value of Elimination

Elimination should be actively maintained through the bowels, kidneys and skin. My favorite remedy is the old spirit of Mindererus, with an excess of carbonate of ammonia, combined with spirit of niter and copious ingestion of water. A cotton jacket around the chest will favor diaphoresis, with all the benefits and without the inconvenience and nastiness of the poultice. The use of the glycerinated kaolin pastes recently devised is in favor with many. They are harmless and have the benefit of the poultice without its inconvenience.

In bronchopneumonia, the smaller bronchi may be relieved of viscid exudate by emetic doses of ipecac, but prolonged nausea should not be maintained. Pilocarpine has been proposed for this purpose, as well as for diaphoresis, but the cardiac depression, and danger of collapse, and excessive and disagreeable sweating and salivation, should exclude its use.

Pain may be relieved by opiates, judiciously used, but they should be given with caution to children and the aged, as in such, especially in bronchopneumonia, the pulmonary sensitiveness may be obtunded and no effort be made to expel the mucus so often abundantly present.

Complications of pleurisy, peri- and endocarditis must be treated as they arise.

In conclusion: In robust, and vigorous patients, abortive treatment may be instituted, but it is well to bear in mind that the affection is frequently of short duration, and we may not be certain in a limited number of successful cases, that our patients have recovered, not in consequence of our treatment, but rather in spite of it. In the debilitated, we should from the first use every means to support the system, keep up free elimination, combat toxemia and avoid all depressing measures.

We occasionally see cases that show great prostration and toxemia from the first, and our patients slip away from us in spite of all the measures we may be able to use.

It is to be hoped that laboratory experiments will succeed in finding an antipneumonic serum that will prove to be an effective antidote to the toxin of the disease. Klemperer's experiments give hopeful indications that success may ultimately be obtained in this direction, but so far none such has been produced.

—:o:—

The specially interesting point in this paper is the evidence that it gives of the utter bewilderment of the authors cited in regard to the application of drugs in the treatment of pneumonia. The conception seems inveterate that to be a proper treatment for such a disease, a drug must be a

specific for it. This conception is soon dissipated in the mind of any physician when once he begins to apply drugs directly to combat pathologic conditions and the symptoms arising from them. Until the entire profession learns to do this, we are nothing but a race of bunglers, and our drug therapeusis will be ineffective.

The changes in the prevalent theories as to pneumonia have not altered the physiologic conditions present, and consequently remedies really effective under the old theories are just as effective under the new. We are, however, indebted for one most important point, and that is the recognition of toxemia as a cardinal factor in the production of the symptoms. This vindicates the clinical observation of our forefathers as to the beneficial effects of bloodletting in those who could bear it, and of such remedies as antimony and veratrum, which so powerfully stimulate elimination. Take this aimless, bewildered blundering in the unknown sea of therapeutics, and compare it with the clean-cut, direct, precise and yet elastic therapeusis of the active-principle user, and we realize that order has come out of chaos, that firm ground has been at last discovered, and that there is at last a scientific accuracy in therapeutic application which permits uniformity in the practice of the entire profession. All over the country tens of thousands of physicians are applying aconitine and digitalin to meet the basic vasomotor conditions of pneumonia, with strychnine on the one hand and veratrine on the other to meet the two principal variable indications, and to these adding such other remedies as conditions may require, always using one remedy when the case demands it—not because the disease is pneumonia, but because the indication for that remedy is present. In city and country, north, south, east and west, lowland and upland, seashore and mountain, the same remedy is employed to meet the condition for which it is exactly fitted.

We have said this over and over again, most of our readers comprehending as fully as we do ourselves. We keep saying it because it is still to be comprehended by very many others of our brethren, of whom a thousand new ones appear on our mailing lists every month. All our old friends understand that this message is not for them, but for the newcomers. Let this be a reply to many letters which come to us reading as the following does, which has just been received:

"Why do you keep beating at these fellows to teach them how to cure pneumonia? While they shut their eyes and ears and refuse to learn, the rest of us are laughing at them, and would be enjoying their stupidity, were it not for poor humanity."
—Ed.

NEURASTHENIA IN ADULT LIFE

This is the fourth paper in the series on "Neurasthenia". Cases are narrated illustrating the nature, development and perverted mental and physical conditions of different types

By WOODBRIDGE HALL BIRCHMORE, M. D., Brooklyn, N. Y.

As we have pointed out upon occasion, the adult life of men begins potentially later than the corresponding life of woman, and continues longer; also, so far as the individual is concerned, the portion of the man's life, the period between childhood and adult-life is comparatively of short duration, yet it may be prolonged. Thus, in chaste celibates the nervous irritation produced by long continued and unsatisfied, sometimes strangely perverted desire, often subconscious, may cause serious interference with health. The fact is that the condition of active but unsatisfied

desire may become as perilous to men as to women.

Nervous Imbalance Develops in the Physically Weak

It is not in the man of the strongest masculinity, however, that this condition causes the most serious disorder, presumably because the instinct in these men becomes so readily the dominating instinct, and compels the man thus, so to say, driven (in this respect Maupassant is almost scientifically accurate in description) into actions and sometimes into very reckless ones. On the contrary, it is in men whose bodies are very deficient in strength, beauty and nervomuscular development, and the will debased, but with intelligence highly trained, in whom the neurasthenic imbalance develops most rapidly into a seriously false and potentially murderous monstrosity.

An illustrative case, truly hair-raising in its horrible details, was mentioned some months since in the public prints, but the facts were much more serious than many physicians believed at all possible, until we came to know them. No murder was committed and the final outcome rather partook of farce than of tragedy, yet it might easily have ended otherwise than as it did.

The young man would no doubt have "made good his threat" had the chance been given him, but he never would have made the threats had he been wise enough to tender to some one of easy virtue the money his unwisdom had caused him, none too willingly, to expend. The circumstances educated his judgment and he ceased to struggle with his natural desires. Yet this man of twenty-five years, who imagined his supposed victim a virtuous untried maiden, had been seduced about eight years before by the wife of one of his friends; a circumstance which should have made clear to him that he was pursuing a course, in insisting on the projected marriage, which would end in his ruin. His mind was acute enough to plan a criminal scheme, a fraudulent marriage, which would have been perfectly successful, if the woman whom he assailed in intention had not developed a quality which he lacked utterly, physical courage, and destroyed the conspiracy as if it had been a house of cards.

A Tragedy of Murder and Suicide

The same lack of balance between the various fragments of the mentality, which we have explained as the true essence of neurasthenia, as distinguished from the conditions big with potential dementia, and like the case just referred to having origin in sexual desire, and this, in obscure way, gave the motive for a tragedy of murder and suicide in this city last winter. The young woman said that she knew the young man loved her but he had never told her so, and wishing to bring about a settlement of the question she accepted an invitation to attend a party of pleasure with a man whose reputation for success among women was the envy of his fellows. He is a splendid brute man, the very antithesis of the unfortunate weakling who imagined him to be seducing the woman he loved.

The morning after the party which this man and his flame attended, this unfortunate man purchased a revolver and called on the young woman, and again left her without a declaration of his love, of which declaration the young woman said: "I tried hard to get him to one but instead he only made threats to kill me and himself if I went any more with Jim;" and meeting her in company with the man he hated he mortally wounded her and killed himself by a second shot. In this case the activity and steadiness of mind needed to hold a responsibility and obtain a salary far in advance of his years, and the moral courage needed for suicide, were associated with a will too weak to make trial of his fortune and ascertain by a simple question the esteem in which he was held by the woman he loved, and yet he had sufficient bravery to die, and to leave a letter that he had killed Jane to save her from Jim, and that he found it sweet to give up his life knowing her to be safe.

The Culture of Self Restraint

Another interesting form appears in those who claim that they have made a conquest of self and have reduced all their desires, wishes, longings and appetites to complete subjection to the will and "judgment." Here the imperfect development is plainly shown, because the power of enjoyment is wholly rudimentary, in respect not to the sex functions alone, but also in respect to a large part of the faculties of man. This was the sort of self-mastery obtained under the monastic discipline, the self-mastery obtained by imprisoning oneself for life.

This same form of neurasthenic cultus, the misappreciated pendoculture of self-restraint, is seen in a certain class of moralists, true moral monstrosities who see not that it is their own filthy imaginations which give vile suggestions to beautiful things. To point the argument I use an instance which is within my own experience. A man, who wears the garb of a Protestant priest, and is my long-time friend, was with me at a place where young men and maidens, suitably clad, were enjoying to the utmost the pleasures of the surf and the sand. Among the men was one who from his physical perfection might have been judged to be an incarnate Apollo; two ladies standing near us were admiring him openly as "a beautiful human brute," to use the words of one of them. As it was impossible not to hear their words where we were standing, we heard all that was said.

They were using powerful field-glasses, so was I, and I offered mine to my acquaintance, who said: "I do not need them, I can see quite too much immorality and viciousness without the aid of glasses."

I replied: "Let him that is without sin cast the first stone."

Just then one of the ladies said: "Alice, do you know I am almost inclined to think that man has a better figure than your husband."

"No, you are wrong, I think, Mary dear, that man's arms are hardly symmetrical; see there, when he picked up that girl, do you note how much stronger his left arm is than his right?"

"Yes, I see; George *is* the better man."

All four of us had seen the act. I confess I saw in it only a well-timed display of muscular strength, which saved the young woman an ugly fall, as she was caught in a big roller and had lost her self-control. But the teacher of morality said: "Let us find some better occupation than watching men and women, lost to all decency, disporting themselves in each other's fond embraces."

I asked: "Say, Tom, is it you or your black coat that is talking? Say, man, I have an extra suit. Let us join these bathers. I know at least a half and the rest probably know me."

"No, if I could do it I would destroy the whole place; it is a blot on the face of a Christian land."

Seeing Sin Where None Exists

It was in vain that I challenged him to tell me where the wrong came in, and in vain that I showed that his unbalanced mind saw nameless sins in acts that injured nobody.

"He would say: "Their thoughts are vile and if their words are not it is only because such speech as they wish to utter would be rude."

This man had stood well in his classes at school, and is a shining light among his clerical friends; where after the straitest sect he lives a minister; yet he is at heart a coward, except when laboring under a certain sort of religious ecstasy. While he stood well in his classes he had absolutely no friends in the college, and he would go to religious meetings and there use language in his preaching, which if used elsewhere than in the pulpit would have had serious results. He had married and had a son, a splendid boy, aged twelve years, who was at a big boarding school as far from his father's influence as his mother's good sense and her brother's purse could place him. The reason given by his mother was that she did not want his youth ruined

"by theoretical acquaintance with intellectual sewage in which his father bathes, three times a day."

The strange part of the neurasthenia which conditions this man's state of mind is the association with a lack of any esthetic sense. To this Rev. E., the beautiful "Diana and Actaeon was only a picture of naked women, dogs, a man with a stag's horns and some trees." The punishment of a prurient curiosity, of Actaeon, was something he could not understand. "What was the difference between standing and watching those bathers yesterday, and standing where you can see a woman bathing who believes herself alone?" This question shows the limitation of his mind and its lack of the sense of proportion.

This Man Not Mad—but Neurasthenic

I have given space to this case because it is one of the most perfect cases of the kind which I have seen. The man is not mad, he is not insane, not to the least degree, but he is suffering from mental ill-balance, he is neurasthenic, he is at this present time as he has all his life been, suffering for a misconstruction of his scale of proportion, his sense of cause-relation. His mental faculties, the whole mentality in fact, developed far in advance of the body, its impulses and appetites, its motives and desires, so that he was able by the aid of parental suggestion to see in the developing desires of the body a recrudescence of the curse inflicted upon Adam; but while the curse and these desires must be submitted to, the body may be redeemed and sanctified by prayer, and its faculties dedicated to holy uses.

Insane? No, I repeat it, not at all, only the appreciation of experience, observation, sensation, logic and the association with men of different thought systems, have not been sufficient to force the mind to properly estimate the evidence sustaining theses other than his own. Nor does this failure appear especially wonderful if we call to mind that he is now, and has been all his life, surrounded by men who see things in the same direction as he does, who repeat to him his own thought and imaginations as if both thoughts and imaginations were statements of objective fact drawn from their own experience. The brain has received such and such stimuli, so many cells belonging to the personal triad of faculties have received a special stimulus, that they now dominate the reflexes into consciousness.

That is all—just yet. As Kipling says: "That is another story." Let us wait and see.

Neurasthenia May be Mistaken for Insanity

These three forms of neurasthenia must be regarded as the aftermath of a neurasthenia beginning during the period of puberty, not as a neurasthenia taking origin in adult life. In fact they appear to be symptomatically continuations of a series of symptoms, little pronounced but diagnostically sufficient, actually dating from childhood, but unrecognized, presumably because the degree to which the rest of the individuality suffered was not sufficient to attract attention; and that these cell groups even existed the philosophy of his tutors would have not questioned but denied.

Under these conditions the neurasthenic state is, if very pronounced, mistaken for insanity; sometimes for melancholia, more frequently for mania. That the imbalance may reach the conditions needed for madness is nothing improbable, for the difference is one of degree only. Thus the distance between standing in a pulpit and by language and gesture inciting an audience to assail a building, brandishing an axe and declaring one's willingness to lead the attack for the good cause's sake, is but little removed from the overt act of leading.

But the conditions differ by that small measure which is often so vital, so pregnant with distinctions. In the mind of the man who does not lead, who does not wish to lead, whose lack of sincere intention to do so is shown clear in both word and gesture and is so understood by the sensible part of the audience, the inhibi-

tion is perfect. But in the mind of the man who seizes an axe and begins active destruction inhibition is lost, the will has abdicated, the unfortunate starts on the journey to the hospital for the insane, impelled by a suggested idea. A suggestion made to him on some like occasion years before and then resisted, has remained practically dormant but not dead, renewing its stimulus through the memory's action from time to time yet hitherto ineffectually, because the inhibitory will, moved by some unknown stimulus, inherited maybe or acquired, has hitherto said "No."

Now the stimulus to action becomes effectual, because the impulse to do something, forced upon the will from outside, represents a larger wave (so to say) than the restraining impulse-wave, and overwhelms it, mastering the inhibition impulses becomes the dominating force in the Ego, and carried away by the confusion of his own voice with a voice from outside, an outside which is real in point to time —"I heard my dead father, dead at least twenty years, bidding me smash the window." [See the account of the trial of Hunt for malicious mischief in Nottingham.] The man becomes a monomaniac and his mania destruction.

I have the notes of a biographical incident in which is recorded how a girl made neurasthenic, before puberty, by her mother's vanity, reduced to a simple shadow by parental discipline, upset by the starvation of the spiritus, the individuality, until she became a subject who automatically obeyed impulses from without (i. e. suggestions), married to a man by her mother's will, without one trace of sexual attraction for him, informed of the unfaith of her husband by a misjudging friend, who repeated a tale as true which really had no foundation, became at first wildly excited and then suddenly calm, and demanded of her friend: "What shall I do."

The friend replied: "I don't know, but if my husband did such a thing I should shoot him at sight."

"Shoot him at sight?" the unfortunate said.

"Yes," repeated the friend, "Shoot him at sight."

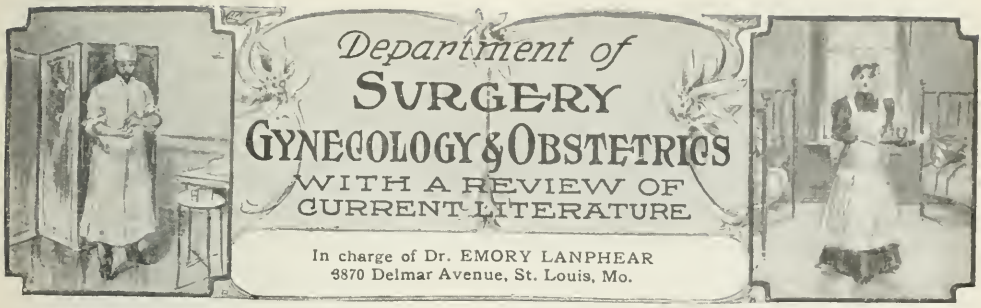
The friend afterward testified that the neurasthenic repeated these words a number of times, at first aloud, "Shoot him at sight," then repeated it in a whisper and finally her lips moved without utterance, and she fainted.

Great excitement followed, but on recovering from the fainting fit she appeared just as ever she did and the next day there was nothing to indicate that her mind was dominated by "a fixed idea." Two days after her husband arrived, the unfortunate young wife heard him open the house door, left her room where she had been reading and went to the head of the staircase. Her husband turned at a landing, saw his wife, held out his arms expecting his wife's embrace, and received a pistol ball in his neck instead. Fortunately no serious harm was done to him, but his unfortunate wife is still the inmate of an asylum, and when aroused from her preoccupation will say to you: "Shoot him at sight; yes, I must shoot him at sight."

The Fruit of False and Foolish Teaching

This murderous assault was the natural result of the teachings and the threats which had been made to her by her foolish mother in her infancy, and the conversations which she had overheard and of those in which she had taken part for a long period, at least as many as twelve years; and the idea had been impressed upon her so-called mind that a wife had no honorable course but murder under the given circumstances. Given the conditions, the results which followed ought to have been anticipated. The catastrophe was the inevitable result of the circumstantial environment producing a neurasthenia, which beginning in childhood had gradually grown worse until it culminated in the complete overthrow of the Ego, so that to this unfortunate woman her friend's answer, "shoot him at sight," had all the force of the often-mentioned "voice divine."

(To be concluded next month)



PUERPERAL ECLAMPSIA

A resume of the pathogenesis and symptomatology of Eclampsia, a discussion of its treatment, with the report of three cases

By T. O. HARDESTY, M.D., Jacksonville, Illinois

ONE writer defines eclampsia "as an acute disease which may occur in the pregnant, parturient or puerperal woman, and is characterized by clonic and tonic convulsions, during which there is loss of consciousness, followed by more or less coma." From this definition as well as from my own experience it seems to be a condition rather than a disease.

The Pathology of Eclampsia

Many of our best students have tried to locate the pathological cause and establish a theory as to the character of the trouble, but no sooner did they take one stand, than some other, equally studious, would disprove it. Today, in spite of their earnest efforts, little can be declared as settled. Indeed, so many theories have been advanced that one writer has designated eclampsia as "the disease of the theories." In some respects it resembles uremic convulsions; and one writer claimed that convulsions are caused by carbonate of ammonia —in the blood—the result of the decomposition of urea. Hydramnion and increased blood-pressure each seems to have been disproved.

Bacteria, now recognized as the cause of so many diseases, have been presumed to play an important part in this condition; but thus far no microorganism has been demonstrated as constantly present.

At one time eclampsia was considered a disorder of the nervous system, which in some women is very unstable, they being prone to eclampsia and epilepsy; and it is well known that most pregnant women have a nervous system very sensitive to external irritants. But such a theory has not been substantiated.

Another writer suggests the transfusion of fetal blood through the placenta into the mother's blood, the fetal blood becoming agglutinated, causing thrombosis. But this theory has found no footing.

Is Eclampsia Due to Autointoxication?

The last and it seems to me the most plausible theory is that of "autointoxication." This seems to be a name to fill a long-felt demand; and it can be applied to almost any pathological condition found on autopsy! That this toxic agent arises from lack of elimination of certain poisons from the blood by the skin, kidney and other eliminating organs of the body, seems plausible. The autointoxication is claimed by some to be the product of faulty fetal metabolism. This theory is supported, in

that after death of the fetus during pregnancy, recovery follows, as also after delivery. But this theory seems disproved by the case of a girl eighteen years old who was pregnant four and one-half months with hydatidiform mole, yet, who had typical eclamptic seizures; and also the fact that eclampsia may occur some days after delivery. But this does not affect the general theory of autointoxication.

It has also been claimed that defective kidney is the cause of the autoinfection, but now it is conceded that it only sometimes accompanies eclampsia. In many cases the urine is normal; and albumin may and may not be found. An acute or chronic nephritis may or may not be present. Albumin being present in the urine does not necessarily mean disease of the kidney, as any violent exertion may cause temporary albuminuria. In fact, only a small percentage of women suffering from chronic nephritis have eclampsia. But most of the autopsies of eclamptic women will reveal renal changes, varying, from acute nephritis, with necrosis of renal epithelium, to other lesions, as congestion, small hemorrhages and degeneration of convulated tubules.

All evidence, however, tends to show that these conditions accompany rather than cause eclampsia.

Constancy of Liver Changes

The liver lesions found post-partum are very characteristic and constant. The essential lesion found is hemorrhages both in liver-tissue and under the capsule. The vessels of the portal spaces are enlarged and ruptured; thrombi are found; fatty degeneration of liver-cells take place; areas of necrosis are found in the liver-substance, extending peripherally.

The brain also shows pathological changes but not so constant as the liver. The findings are edema, previous thrombi and apoplexy.

It is apparent that the main lesions found in eclampsia are found in the kidney, liver and brain. But it would seem that the anatomical changes are not constant enough to designate it a disease. It will be observed that there is a similarity in the lesions and changes in the different organs mentioned.

There seems to be some unknown, poisonous substance circulating in the blood (toxemia) which may give rise to disease in the several organs. This autointoxication-theory evidence seems to support, but proof is not conclusive.

Some Interesting Clinical Facts

In following the clinical history some interesting facts present themselves, more especially when we consider that the exact cause is as yet unknown. Statistics give one case in 500 pregnancies. Five authors give one case in 133 pregnancies. Columbia Hospital gives 28 cases in 2035 pregnancies. In my own practice three cases in 520 pregnancies. Columbia Hospital has the following facts:

Ages of women from 16 to 44; Primiparæ 21, multiparæ 5.

Occurring ante-partum 57 per cent. Intra-partum 25 per cent. Post-partum 10 per cent.

The least number of convulsions noted was one—while one author records 156.

As to time, one case was given as three months ante-partum and ten days post-partum.

It is reported that 70 or 80 per cent are primiparæ and about 30 per cent die—both mother and child.

It is my opinion, that, in general practice, a far greater per cent of mothers recover and a much larger per cent of children die.

The Symptoms of Eclampsia

In some women eclampsia may occur without any warning whatever and the patient apparently be in perfect health. The majority of cases however are preceded by premonitory symptoms. The most important of these are headache, edema, disturbance of vision, vertigo, vomiting, somnolance, ringing in the ears, irritability and despondency.

The headache is probably the first subjective symptom noticed. It is usually in forehead or in one or the other parietal

sides, seldom occipital. The pain is not constant, is more of a remittent type, and may be noticed several days before convulsions appear; associated with it may be dulness or drowsiness, irritability and sometimes sleeplessness. Disturbance of vision is in many cases observed; it may be simply indistinctness of sight, the eyes tiring quickly from use, or there may be complete blindness, which may be present for hours or days before and after convulsions—due to albuminuric retinitis.

Epigastric pain is the least frequent, but when present may be very severe, and suggest gallstone colic or an occlusion of bowel.

With these premonitory symptoms the urine becomes decreased in amount and usually contains albumin and casts. These symptoms may be observed for a long or short time or they may not be noticed at all, but under close observation no doubt some would be noticed.

The Character of the Convulsion

The convulsion comes on abruptly; the spasm may begin either when the patient is asleep or awake; if awake, she may have been talking one minute, when suddenly, she is silent, in complete repose, her eyes fixed apparently on some distant object, body motionless, pupils dilated (though they may be contracted). The first sign of spasm is a quick movement of the eyelids and alae of the nose. The eyeballs roll from side to side and in various directions, and are half-hidden beneath the upper lids. The muscles about the mouth begin to twitch and the mouth is distorted, the head turning slowly from one side to the other. The contractions extend rapidly to the arms, body and limbs, a stage of tonic contraction occurs. the body becoming rigid and arched, the upper and lower limbs are usually extended, toes contracted down, thumbs flexed upon the palms and fingers contracted over; contraction of muscles of respiration arrests breathing, which becomes stertorous and hissing; the face at first pale now becomes congested, has a dusky red hue, is swollen and resembles asphyxia. There is foaming at the mouth; the muscular contractions sometimes cause the tongue to protrude from the mouth, and it is often bitten.

After fifteen or twenty seconds the contraction becomes clonic; this clonic form of contraction begins also in the face and spreads over the body as before, with the breathing very irregular, jaws opened and closed violently. Violent contractions of all the muscles of the face contort the features; the skin is congested, and the conjunctivia injected and may show ecchymoses. The attack does not subside all at once but the spasms lessen in violence and frequency, the skin becoming covered with a profuse perspiration. The convulsive seizure usually lasts two or three minutes, though it may continue much longer.

Coma; Pulse and Temperature

The coma which follows each convulsion may last for a longer or for a shorter period; the severer the attack the longer the coma. Sometimes consciousness is regained between the convulsions.

The pulse at first is rapid, full and bounding but becomes weak and shallow toward the end of the convulsion; growing weaker and faster as the convulsions continue.

During an attack the patient is insensible—does not see, hear nor feel; and after she awakens from the coma she recollects nothing concerning the convulsion and sometimes recollects nothing that happened 3 or 4 hours previous to it.

The temperature during an attack runs up to 102° or 104° F.—the severer the attack the higher; in fatal cases it may go to 107 or 108. The cause of such high temperature is not known, as the uterine lochia has been found to be perfectly sterile.

Sometimes the patient does not recover from the coma of one spasm till another follows.

One author states that a form of insanity follows eclampsia in 13 per cent of cases. As to the time this disorder appears in puerperium it is designated as ante-partum, intra-partum and post-partum. Ante-partum is claimed to occur in 40 per cent of the cases.

If labor comes on and eclampsia follows it is called "intra-partum." In this the convulsions are not different from the other. There may be one convulsion only or it may speedily be succeeded by others. Uterine contractions are usually hastened, and after the uterus is completely emptied the convulsions cease.

If convulsions come on after delivery the eclampsia is called "post-partum." This may happen at any time within ten days. Usually there is but one convulsion, yet there may be many, after which a rapid recovery commonly follows.

It might be stated here, that a patient who shows symptoms of or having had eclampsia at one time, is almost certain to have a recurrence in subsequent pregnancies. Such a prognosis should be made and death predicted unless proper care and treatment be instituted and continued. A family history may show that a mother or sister had eclampsia.

The Treatment of Eclampsia

In taking up the treatment I will first speak as to prophylaxis. Since the cause is obscure, treatment must be purely symptomatic; and since toxemia seems to be the most plausible cause, we must first deal with that; hence to prevent toxemia is to prevent eclampsia. One author is of the opinion that the primary starting point of toxemia is in the bowel, the intestinal inactivity and decomposition causing the kidneys and other organs to be involved; and since by proper dieting and antisepsis all these conditions can be improved (especcially of the kidneys and other organs of elimination) we should be on the alert and as soon as the premonitory symptoms of eclampsia begin to be manifest we should keep close watch over the patient, making frequent tests of the urine, regulating the diet and increasing elimination, keeping the bowel acting regularly and arresting fermentation as far as possible; regular hours of sleep should be insisted upon, also moderate but sufficient exercise.

Some advise such a radical measure as the induction of premature labor as a precautionary measure. This seems to me to be entirely too radical, if not criminal. Women under such conditions are very susceptible to infection, endangering thus the life of the patient from sepsis.

The Relief of the Spasm

The general practician being called to a case of eclampsia, usually finds the patient in convulsions. The first desire is to relieve the spasm. There is immediate danger of the patient biting her tongue, so a cork should be placed between her teeth, or better, a folded towel drawn between her jaws to hold her tongue back.

A small amount of chloroform should be administered to relax the muscular tension, after which a hypodermic of morphine, gr. 1-4, and atropine, gr. 1-150, should be given, repeated in a half hour if necessary.

All clothing should be perfectly loose. If the patient is strapped to the bed all restraint should be removed, care simply being exercised to keep her on the bed.

Fifteen drops of tincture of veratrum veride should be administered every 20 to 30 minutes till the pulse which is 120 to 160 comes down to 70 or 80 or better 60. and afterwards enough to keep pulse down. [What is the matter with veratrine?—EDITOR.] There is not much danger of convulsions while the pulse remains at 60 or 70 per minute.

Care should be taken to prevent anything given by the mouth from entering the air passages and giving rise to inspiration-pneumonia.

The bladder should be emptied at once by a catheter and as often afterwards as necessary.

Attention to Excretory Organs

The bowels also should be looked after at once. If patient can swallow, one ounce castor oil or an ounce of epsom salt should be given. To facilitate the action of this a high rectal enema of soap suds with glycerin and sulphate of magnesia should be given. After the bowels have been thoroughly emptied a high enema of normal salt solution should be given.

Diuresis should be stimulated as much as possible by application of hot packs or baths. Pilocarpine should not be given on account of its liability to produce edema of the lungs.

Some of the older writers advise bleeding to the amount of 200 to 400 grams (6 to 12 ounces). I see no objection to bleeding, if the patient be a robust, full-blooded person and if bleeding is followed by an enema of normal salt solution; in fact I believe much good might be accomplished.

In one case I used amyl nitrite with good effect in checking the convulsion. Stumer gives thyroid extract, 5 grs., every four hours and claims good results. Twenty or thirty grains of chloral hydrate dissolved in sufficient water and suspended in four ounces of milk may be given per rectum and repeated. It acts well in many cases.

The Obstetric Treatment of Eclampsia

Leaving the direct control of the convulsion and prevention of its recurrence we turn to the obstetric treatment. If eclampsia comes on before the time for delivery it is my opinion it should be treated expectantly. If the time is up we should change our tactics. It is claimed that from 80 to 90 per cent of the cases of convulsions cease instantly after delivery, so it is our duty to facilitate the normal labor as much as possible.

One often finds on examination that the os is patulous and dilating, the womb is contracting and labor is in progress. This may be facilitated by dilating the os between uterine contractions. After the os is fully dilated and parts relaxed the bag of water may be ruptured to allow the presenting part to pass into the pelvis, or the hand may be inserted into the womb, grasping one or both feet and bringing them down —thus delivering as soon as possible. In such cases the child is usually dead; if not, due care should be taken, as in other deliveries, not to injure it by rough handling or by undue traction.

After delivery of the child there is no need to hurry, ordinarily, to finish the third stage of labor, as a moderate amount of hemorrhage is desirable.

After the delivery of the placenta, the woman should have the constant care of the physician, personally, as long as the coma lasts, and as often thereafter as necessary, till danger is past and patient convalescent.

Vaginal and Cesarean sections have been advised, but the only argument in favor of such an operation is that of saving the child's life, should the child yet be alive. Operation must be done very early if at all.

A Few Case Reports

With this paper I wish to report three cases of eclampsia occurring in my own practice within a period of eight years.

Case 1. Mrs. C—, age 18, white, weight 120. Family history good, primipara. History showed pregnancy of 9 months' duration. No premonitory symptoms of eclampsia elicited, aside from the edema of the feet and legs which was very pronounced.

At 7 a. m. patient complained of pains in the back, and of uterine contractions, one hour later she had a slight convulsion followed by coma, in one-half hour a second convulsion, followed by others, growing harder and longer. Uterine contractions were strong and expulsive. On seeing the case some four hours after first convulsion I found the woman in tonic convulsions, with only slight remission, cyanosed till the skin was purple, tongue protruding and swollen, pupils dilated, pulse 150 and thready; had been unconscious for four hours. The child's head was outside of the vulva—black and lifeless. It had probably been born one hour. The family did not know labor was in progress! The child was delivered without trouble. About one pint of blood followed. The urine was drawn with a catheter; 1-4 grain of morphine and 1-120 of atropine were administered hypodermically. The placenta was delivered and the womb contracted as usual. Hot water bottles were placed around her body. Three pints of warm water with soap and two ounces of sulphate of magnesium were given as an enema. In thirty minutes

there was relaxation, normal color came back to the face, the bowels operated, profuse prespiration appeared, the pulse dropped to 110 and temperature to 100. In three hours after delivery the patient was able to swallow, temperature was 99°F., and pulse 95. I gave 5 grains calomel, also a hypodermic of morphine, gr. 1-4 and atropine gr. 1-150. No further signs of convulsion appeared, and she made a rapid recovery.

Two years later this patient died from eclampsia.

Case 2. Mrs. R—, age 25, white, weight 135, habits good, history and surroundings good. One sister died from eclampsia. This was her first child. Her feet and limbs were swollen; she was seven months pregnant. She was suddenly taken with convulsions. She was given morphine 1-4 grain and atropine 1-120 grain hypodermically. Amyl nitrite was given during the convulsions. Efforts at elimination were established. The convulsions followed at intervals of three or four hours; coma after each spasm would last about one-half hour, the patient becoming conscious between the paroxysms. A severe frontal headache was constant. Just preceding each spasm the patient would complain of a severe parietal pain. The pulse was 130, fair; temperature 101°F. Convulsions were practically controlled by rectal injections of 30 grains of chloral, plus the morphine and atropine (and amylnitrite inhalations while in the fit). After forty-eight hours labor came on naturally and easily; for last two hours there had been no chloroform given. Labor was completed in three hours, with two convulsions during labor. Uterine contractions were normal except during the convulsions when they would become tonic and expulsive. After delivery a rapid recovery followed.

There have been two subsequent confinements with no eclampsia. Yet some of the common premonitary symptoms were manifest.

Case 3. Mrs. O—, white, age 20, weight 140, history good, primipara, eighth or ninth month of pregnancy. Feet and limbs were badly swollen. After suffering two days with nervous headache, (very restless with but little sleep for two days) she was suddenly taken with a convulsion. The family lived eight miles in the country and had not suspected danger. On seeing the patient I found coma following the convulsions. Usual symptoms were manifest. The urine was drawn and the bowel flushed; she was semi-conscious. Three grains of calomel were given by mouth, with morphine hypodermically. The first spasm was followed in two hours by a second which was controlled by chloroform. Hot-pack was then applied. Upon examination no fetal heart-sound could be detected. Cervix soft and patulous, sufficiently dilated to admit the end of middle finger, with head presenting. The womb was contracting well and labor progressing. The convulsions, coming about one hour apart, seemed to be modified by treatment. Dilation was advanced as much as possible by manipulation. As soon as the os was completely dilated the bag of water was ruptured, the hand introduced into womb, two feet grasped, child turned and delivery shortly completed. Chloroform was given until all muscles were completely relaxed before turning the child. A rapid recovery followed. She has had one normal subsequent pregnancy.

PROLAPSUS OF THE RECTUM

A discussion of the different types of rectal prolapse, their causes, pathogenesis, symptomatology and results. Practical aid in diagnosis, and indications for treatment

By CHARLES J. DRUECK, M. D., Chicago, Illinois
Professor of Rectal Surgery, Jenner Medical College

PROLAPSE of the rectum implies the descent through the anus of a portion of the bowel. This protrusion may consist of the mucous membrane alone or it may be accompanied by the other coats of the bowel, and sometimes includes a fold of peritoneum. This affection is sometimes erroneously called prolapsus ani. Erroneously so, because the anus is only an aperture and is fixed, and although it may to a degree evert, it cannot prolapse.

The rectum is held in place by the perirectal areolar tissue and fascia, the levator ani, the recto-coccygei, and the two sphincter muscles, and the stretching or relaxing of these allows prolapsing. A weakened condition of the muscles and structure constituting the pelvic floor or a lacerated perineum predisposes to prolapse of the rectum and perpetuates it when the bowel has descended. The protrusion in turn tends further to relax the musculo-fibrous structures.

Prolapse varies greatly in the degree, but may be classed under three general headings:

1. Prolapse of the mucous membrane.
2. Prolapse of the mucous membrane and other coats. In exaggerated cases the peritoneum is included.
3. Prolapse of the upper portion of the rectum into the lower (invagination) or intussusception.

Prolapse of the Mucous Membrane

This is merely an everting of the mucous membrane of the lowest part of the rectum, and is due to the looseness of the submucous connective tissue. It is the most common variety, and occurs chiefly in children between two and five years, and also in women rather than in men. During defecation the mucous membrane protrudes from the anus, but returns promply afterwards, usually of its own accord, although occasionally requiring manipulation. This condition is physiological in the horse.

Etiology.—The acute variety is found most frequently in children, and vice versa children nearly always present the acute variety of prolapse. The straightness of the infantile sacrum predisposes as does also the relaxed condition of the muscles and other fibrous structures about the anus, such as frequently occurs in anemic and tubercular subjects from the abstraction of fat from the perirectal cellular tissues. The exciting cause, however, is usually straining either at stool during constipation or diarrhea or as a result of phimosis, stone in the bladder, or intestinal worms. Prolonged coughing or screaming may also cause prolapse.

In adults prolapse comes on gradually, as a rule, although sudden prolapse occasionally occurs. The more frequently the bowel prolapses the more stretched and relaxed the parts, and this weakened condition in turn favors future prolapsing. Conditions producing edema of the pelvic tissues, such as pregnancy, parturition, fecal accumulations and hepatic troubles induce prolapse by allowing a stretching and separating, especially of the long fibers of the bowel, as do also paralysis, ulceration, incision or trauma of the sphincter, or sodomy, by weakening its action, which normally should narrow the outlet. Repeated straining due to anal fissure, dysentery, cystitis, stricture of the urethra, or enlarged prostate produce muscular tenesmus, which induces prolapse. Mechanical dragging down of the mucous membrane by polypi, tumors, foreign bodies or hemorrhoids are frequent causes. Hemor-

rhoids and prolapse are very frequently associated, and the prolapse may involve all or only a part of the circumference of the anal opening. It must be remembered that an internal hemorrhoid may be the primary cause of prolapse, especially the lateral variety, only one side of the bowel coming down, the pathology being that the pile excites the bowel to contraction and in endeavoring to expel the tumor the mucous membrane is dragged down with it.

Symptoms.—In mild cases the ring of mucous membrane protrudes during defecation, but returns spontaneously or by the patient's manipulation, and remains so until the bowels move next time. In the early stage, before ulceration occurs, the protrusion is deep-red in color, or may be scarlet or livid, depending on the condition of the sphincter, and is perfectly painless. The surface is marked by the intestinal folds. If ulceration is present the mass will be red and bloody and considerable pain will be experienced. Later, after the mass has protruded, it will become edematous and difficult to replace, and in old and frequently prolapsed cases the sphincter is relaxed, and though the mass may be easily returned, it will not remain so. When the mucous membrane alone is prolapsed the tumor is thin, the folds radiate from the orifice, which is circular and patulous, and the protrusion is found to be continuous externally with the skin and internally with the mucous membrane.

Diagnosis.—Prolapse is to be diagnosed from polypus by being softer to the touch and having a smooth surface which is uniform in appearance, and by the prolapsed tissue terminating in the rectal wall, and not being attached by a pedicle as is a polypus. Polypi always have pedicles and the larger the polypus the more pronounced and longer is the attachment.

Internal hemorrhoids are frequently difficult to differentiate but the prolapse usually involves the entire circumference of the bowel and has a soft velvety feel, and if carefully examined a slitlike opening in the lower end will be found to open through the prolapse into the lumen of the bowel.

External hemorrhoids, if of the thrombotic variety, are hard and usually smooth and lubricated or moist, and are always separate and distinct growths which are freely movable.

The age of the patient will be of some assistance, as hemorrhoids and polypi are uncommon in children, and the protrusion is more than likely to be prolapse.

Prolapse of the Deeper Coats of the Rectum

This variety consists in the descent of other coats, perhaps all of the rectum, and in exaggerated cases includes the peritoneum. When the protrusion is two inches or more in length one must always expect the peritoneum to be involved, for in any case a coil of small intestine, an ovary or a part of the bladder wall way be included. The prolapse usually comes on slowly as an exaggerated stage of the first variety through long-continued action of the primary cause, and occurs more frequently in adults, although it does occur in children. In either children or adults, however, it may come on suddenly as a result of severe straining.

Anatomic Changes.—In both this and the previous variety the part of the rectum near the anus protrudes first. This protrusion is thick, firm and pyriform in shape, with a slit-like opening in the lower end. This opening is usually at the back of the lower surface, or even on the posterior wall of the protrusion, and is drawn back by the traction of the meso-rectum, although sometimes in females the traction is forward because of the vaginal attachments. The amount of the rectum prolapsed is variable, at times very little coming out, and again the tumor is as large as a child's head (Tillmanns).

In rare instances a large part of the colon may be prolapsed. If such a case is dissected all the coats of the bowel are found edematous and swollen, especially at the most dependent part, and often ulcerated. The areolar tissue is infiltrated, and the muscular tissue is hypertrophied. The extruded part is therefore enlarged, not only by edema and congestion, but also by the development

of new structures. Therefore, the prolapse does not recede to its normal size when replaced and is often too large to be retained. In old cases a hypertrophy of the exposed tissue occurs.

The mucous membrane is thick and dense, leathery in structure, especially in the most prolapsed part. The submucous tissues are infiltrated with a hyaline substance, and the muscular layers are hypertrophied. When the prolapse is recent, it may be replaced, but descends the next time the bowels move. In old or extreme cases replacement is difficult and painful, although gradually the anus becomes patulous and the sphincter paralyzed so much that each time the sufferer defecates, or even moves about, the mass protrudes and makes life a burden.

The bowel is abnormally increased in size and too large for its proper position within the pelvis; and although it may be reduced it will not remain so because the tenesmus set up by its presence expels it promptly. In some instances the mucous membrane is eroded and granular, and easily bleeds. In such cases the odor of the sloughing tissues may simulate malignant disease. A prolapse that has existed for some time is often accompanied with an oozing hemorrhage, which requires astringents to control.

Symptoms.—The symptoms of this form of prolapse are similar to those of the preceding, only more aggravated. As this is a chronic condition, the sphincter is weakened, the pain at this stage is not severe, there is constant mucous discharge, and in severe cases incontinence of feces results. Strangulation is present only in young and robust persons, and is rare in infants or the aged. When it does occur it may be only temporary, but if it continues, ulceration and gangrene will follow, which may terminate fatally if the peritoneum is involved. When the lower part of the rectum alone is involved in the gangrene, a spontaneous cure may take place, but by the separation of the protrusion and the resulting cicatrix a stricture is finally produced which leaves the patient in a more deplorable condition than before.

Complications are prone to arise with the involvement of the peritoneal coat, for it is likely to carry down with it a loop of small intestine, an ovary, or the bladder-wall. When these organs are brought down, they are usually detected by touch in the anterior part of the tumor. The intestine slips away from between the fingers with a gurgling sound, due to the contained gas, or sometimes percussion demonstrates it by resonance. Pressure on the ovary causes a faint, sickening feeling. The bladder is detected by introducing a sound through the urethra. Each condition constitutes a true hernia of the rectum, and must be immediately replaced, if possible, because spontaneous rupture of the rectal wall has occurred in these cases. Hernia of the rectum occurring with prolapse is usually recognized by an unusually large, tense swelling in the anterior part of the prolapse. If the buttocks are raised, the hernia usually reduces with a gurgling sound, and the prolapse may then be easily reduced. If the strangulation is not promptly relieved, death ensues from perforation of the bowel and peritonitis. Usually there is no sulcus or depressed line visible at the peritoneal or bladder junction with the bowel, and so there is no way of determining by inspection the presence, or absence, of peritoneum or bladder in the prolapse.

Diagnosis.—The differential diagnosis. between these two varities is often important. Prolapse of the mucous membrane alone is usually recent, while involvement of the other coats of the bowel is found only in cases of long standing. This implies that it is but an exaggeration of the first variety, but in exceptional cases the deeper coats may be prolapsed from the beginning, as the result of violent coughing or straining. The tumor, when consisting of mucous membrane alone, is always small sized, but when more of the rectum is involved the protrusion may be enormous. When the mucous membrane is prolapsed the tumor is thin and soft to the touch, and the folds radiate from the orifice, which is circular and patulous; but when the whole rectum prolapses the tumor is coni-

cal in shape, and its walls are thick and firm. The opening into the bowel is slit-like, and usually points backward, owing to the traction of the meso-colon or else points forward because of the vaginal attachments.

Prolapse of the Upper Portion of the Rectum Into the Lower (Invagination)

As this is a true intussusception, any part of the large bowel may be found, from the cecum to the rectum. The orifice of the appendix has been seen beside the included bowel. In the previous varieties the dislodged tissues protruded from the anus, but in this form the upper part slips (telescopes) into the lower part, the whole mass remaining within the pelvis. Only in extreme instances does the bowel protrude from the anus. When it does, it appears as a cylindrical, sausage-shaped tumor, covered with a dark-red, hyperemic, mucous membrane. This variety is most frequent in children, but does occur in adults. The etiology of this form of prolapse is not clear. The bowel in endeavoring to rid itself of a tumor or polypus by its vermicular action may become extruded. Yet in the great majority of cases the cause is not known.

Symptoms.—The immediate effect of this variety of prolapse is obstruction of the bowels; but this, however, is seldom complete, for the feces are forced through by the increased contraction of the healthy bowel above, and, in fact, sometimes a diarrhea occurs. The first symptom of the constriction is a sharp pain developing suddenly. It may pass off in a few hours and return again, or it may continue from its onset. Vomiting may or may not occur, and if it does it is sometimes relieved by pressure. Abdominal tenderness may even be absent in some cases. The presence of fecal vomiting indicates complete obstruction, and not the part of the bowel involved.

Edema of the intestinal walls, due to obstruction of the mesenteric vessel, soon follows, and the serous surfaces become darkened, blood and lymph exuding between the surfaces and agglutinating them. The stools may be blackened. If the constriction is severe enough, the prolapsed portion sloughs off, and a circular cicatrix is left. Thus nature attempts to remedy the trouble, although the scar may in time produce an annular stricture. Sloughing takes place usually after the first week and generally within three weeks, although it may occur much later.

Death results in about one-half of the cases where spontaneous separation occurs, and may be due to one of several causes. The local peritonitis which unites the bowel may become general, or the ensheathing portion, through ulceration and perforation, may allow extravasation of feces. Aitkin reports a case where the ulceration and perforation were due to the pressure of the end of the contained portion against the side of the container. Perforation may, however, occur at any weak point of union of the intussuscipiens and the intussusceptum.

On palpation, a tumor may be felt and may be characteristic, although sometimes obscured by thick abdominal walls or distention of gases. The tumor when found is cylindrical, sausage-shaped, and movable, even changing its position at times. Compared with acute obstruction of the bowels, intussusception of the large bowel is more chronic, less painful, diarrhea is more pronounced, or the evacuations are larger, and the vomiting is variable. Such a condition may continue for weeks and death result from exhaustion, or a general peritonitis may develop at any time, especially during the separation of the slough.

Diagnosis.—The diagnosis of this variety is made by introducing the finger within the rectum and feeling the sulcus between the invaginated and the invaginating parts. The bottom of the sulcus, the point where the invaginated becomes the invaginating, may be felt with the finger if it is not too high. If beyond the reach of the finger, a long probe or catheter may be used. Once the sulcus is felt the diagnosis is easy; but when not found we must depend upon the symptoms of intestinal obstruction, and the

case must be differentiated from volvulus, stricture, internal hernia, pressure on the bowel of outside tumors, and obstruction due to biliary calculi, foreign bodies or impacted feces.

The differential diagnosis is sometimes impossible, but in general it may be said that an acute onset is due to invagination, volvulus or internal hernia. In perforation and peritonitis the vomiting usually remains bilious, and not fecal, tympanites is less, and the patient voids gas and feces. The temperature is raised in peritonitis and normal in obstruction. Invagination produces partial occlusion, moderate tympanites, bloody stools, tenesmus and a palpable tumor may be found. Volvulus may have a history of previous peritonitis or internal hernia, the story of an old hernia that has not come down. In this variety of prolapse any portion of the bowel may be involved. Bulteau collected seven hundred and sixty-three cases of invagination, of which two hundred and twenty were involving the small bowel.

Prognosis.—When the mucous membrane alone is involved, a spontaneous cure is frequently effected, simple remedies assisting Nature to a speedy end. In extreme cases, such a cure does not come about, especially in the aged, because thickening has occurred, and surgical procedure is necessary. By medicinal or surgical means, either alone or combined, a cure may be effected in nearly all cases. In adults the prolapse generally involves the small intestine when intussusception occurs, but in children the large bowel alone is usually involved. These points should be kept in mind.

When only the large bowel is affected the congestion may be moderate in amount and continue so for weeks before strangulation or ulceration occurs. This is known as chronic intussusception. Strangulation is more frequent when the outer portion is composed of small bowel than when it is the large bowel which is concerned, because of the greater tightening at the constriction in the former.

NON-OPERATIVE TREATMENT OF A WOUND

Illustrating what may be done by the use of modern aseptic and reparative methods to prevent a serious amputation. An ideal result in an unpromising case

By HUGH JAMESON, M. D., Titusville, Pennsylvania

ON election day, November 6, J. R., age 18, got his left upper arm caught in the cogwheels of a gasolin engine in the oilfield. Being alone, he simply tore himself loose, walked home one-quarter of a mile and the family sent for the family physician. On his arrival he telephoned me to come up and amputate at shoulder joint. Instead of this I sent the ambulance and had him brought down to the hospital.

Under anesthesia I found the triceps torn and mangled almost to a pulp; the skin was entirely torn off with the exception of a strip about an inch and a half wide on the inner surface of the arm. The bone, musculospiral nerve and the larger blood-vessels were the only structures intact. Taking such a condition with a wound filled with oil, dirt, shreds of cloth, sand, etc., the outlook was not encouraging. However, I told his father we had perhaps one chance in a hundred to save the arm, and he said, "take it."

I spent an hour and a half suturing the muscles together with No. 1 chromicised catgut (30-day), being careful to approximate the ends of the different heads as best I could; washed thoroughly with weak bichloride solution, two or three gallons from irrigator, and dressed with moist

gauze and plenty of bovinine night and day. On December 6 I skin-grafted about a dozen grafts, and about eight of them took.

December 19 he went home continuing the same dressing.

January 6 he came in with the wound almost entirely healed, and I put him on bismuth subiodide as a dry dressing. He has every movement and no pain, and I have no doubt that after the muscles fill out, the arm will be almost as good as ever.

A CASE OF EXTRAUTERINE PREGNANCY

An interesting and dangerous case of this condition, presenting some unusual features, and cured by operation; illustrating the difficulty of making an accurate diagnosis

By F. M. VESSELLS, M. D., Perryville, Missouri

MRS. D., age 29, married. Weight 108 pounds. Began to menstruate at 17; regular and painless. Typhoid fever at 15. Has always been healthy, but not robust. Normal labor five years previous. Father and mother have fibroid phthisis. Two brothers and a sister living and healthy. A sister died of scarlet fever in infancy. Two uncles and an aunt died of tuberculosis and an aunt on the maternal side of cancer.

For three or four weeks she was indisposed; felt weak and bad in a general way. Jan. 15 had a sudden desire to go to stool and a fulness of the rectal region. Defecation did not relieve. Was weak and anemic and had no appetite for some days. Jan. 27, sudden bearing down pain in vesical region, frequent desire to urinate. For some days symptoms of vesical catarrh, but odor of urine normal. Improved and did her housework and seemed to be doing nicely.

The Acute Attack of Pain

Morning of Feb. 25 she arose feeling very bad; was weak, nervous and nauseated. About 8 a. m. a sudden sharp pain in abdomen [I could not get a history of a definite point], and desire of defecation. Fainted. Was in a serious condition. Abdomen tympanitic and tender. No fever, slight mentrual discharge, the first since January or December, not certain. Uterus and cervix normal. Was in bed seven or eight days. Steadily improved. No abdominal pain. Again improved.

April 12 she was moved to her mother's in a buggy, seven miles; seemed to stand trip nicely, but at 5 p. m. of that day there was a desire for defecation and while on the chamber she fainted, and was comatose for two hours. She remained very weak; abdomen distended, tympanitic and tender. Shooting pains in thorax and shoulders. Fever 99-100° F. She was in a comatose state more or less deep for five days. April 18 she was very restless, labor-like pains very strong and persisted for five or six hours until put under morphine. Uterus slightly enlarged, cervix dilated, permitting the introduction of index finger. Dark, foul and shreddy discharge. Was delirious.

Up to this time I was "up a tree;" had made no diagnosis. But extrauterine pregnancy was very plain to me now. I called in three older and more experienced physicians. They ridiculed the idea. One called it uterine pregnancy with threatened abortion. Another, tubercular peritonitis. The other had no opinion. The abdomen was so swollen and tender we could not palpate it. Hence could not detect any enlargement or tumor in the pelvis. Fever all the time, 99°-102° F. She remained comatose for eight or ten days, hovering between life and death. There were neuralgic pains in the thorax of a very severe nature; also severe pain in the ab-

domen, not localized, vomiting, constipation, complete anorexia. She improved from April 28. Got up, no fever. Tympanites disappeared. I then found an orange-sized tumor, hard and resisting, anterior and to right of uterus at pelvic brim. Consulting doctors would not admit extrauterine pregnancy.

Operation, Verifying the Diagnosis

About May 15 she was taken with fever, 99°-100° F., and was removed to St. Louis. The attending surgeon would not hazard a diagnosis. A vaginal incision along anterior surface of uterus revealed a mass of organized blood and a dead fetus which had commenced to break down. The sac was adherent to the uterus, bladder, rectum and small intestines. It was impossible to remove it with any hope of recovery. A gauze drain was put in place and vagina packed. On second day the packing was removed and some of the organized blood passed. Pieces of organized blood and placenta passed for some days, when same began to pass through bladder and urethra. In making the vaginal incision the bladder wall was cut. Urine passed into vagina up to the time when the vaginal opening closed and the breaking down tissue began to pass by bladder.

For three or four weeks pieces of the sloughing fetus, bones and all, passed by bladder. Her suffering was intense. Ten or twelve days after operation no fever. She then gradually gained strength. Aug. 1 she was well; no urinary fistula or resulting vesical catarrh. Menstruation has been regular and painless up to this writing, three and one-half years later. Is in good health, weighs 110 pounds and in every way seems as well as before trouble. No pregnancy.

It may seem strange that I did not make a diagnosis sooner. But the history was very vague. The sudden sharp pain in abdomen was absent till February 25; even then it was not localized but general over abdomen, giving the impression of peritonitis. The menstrual flow was not promptly on time and was scant. That was attributed to general ill health. The family history of tuberculosis warped my judgment. I was looking for tuberculosis.

::: SURGICAL THERAPEUTICS :::

NON-SURGICAL CURE OF GALLSTONES

The statement is often made that gallstones may be "cured" by copious draughts of olive oil, by free use of bile, etc. The truth of the matter is that gallstones of themselves are of little importance—a large proportion of men and women past 50 years would be found to have gallstones if the gallbladder were opened; it is only when an autoinfection of the mucous membrane occurs that trouble arises. The infection may take the form of (1) an acute cholecystitis, without occlusion of the cystic duct, (2) acute inflammation of the gallbladder with stoppage of the outflow—abscess of the gallbladder, (3) milder infection, as from the bacillus coli communis, with or without cessation of drainage; all associated with a catarrhal condition of the intestines. These facts explain the apparent efficacy of many of the vaunted gallstone remedies. They contain more or less drastic purgatives, and they give unmistakable relief, although they have the drawbacks of all purgatives in catarrh of the intestines; aggravating the condition after a time. The most promising field for internal treatment is chronic choledochitis without repeated chills and remittent fever, but it requires the greatest patience. A cure is seldom realized in less than four or five months, but it is possible to avoid an operation by careful dietetic and therapeutic management during all of this time. If

the patient is under constant medical supervision, the development of serious complications need scarcely be feared.

The main point in internal treatment is repose, and this must be absolute until the last trace of the cholecystitis has completely retrogressed. This may occur sometimes in four or five weeks, in other cases not until eight or ten weeks or still longer. After all traces of swelling of the gallbladder and of the slightest tenderness have vanished, the patient must be made to take plenty of out-door exercise, abstain from too much fat, sugar and starch, and keep the bowels thoroughly active by saline laxative. Finally, if repeated attacks of gallstone colic become troublesome, or if jaundice become prominent, operative treatment must be insisted upon. [We shall have to persuade Dr. Lanphear to try sodium succinate in a few of his cases—which is not a "drastic purgative." It *cures* and makes operation unnecessary.—Ed. Clin. Med.]

CHRONIC PERIOSTITIS

Chronic thickening of the periosteum positively known to be non-syphilitic in origin will often yield to small doses of iodide of potassium—one gram (fifteen grains) three times a day. It is best given in compound syrup of trifolium or simple elixir.

OPIUM AFTER ABDOMINAL SECTION

The only cases in which opium (or morphine) is indicated after abdominal operations are those in which the intestine has been injured, cut into, torn into, or anastomosis made. Then peristalsis is undesirable as any movement of the bowel tends to prevent the formation of early, firm adhesions on which the life of the patient depends. Opium above all other drugs checks peristalsis; hence full doses of sulphate of morphine may be injected every four to six hours during the first forty-eight hours following such an operation; but no further use would be beneficial, as adhesions have been formed by that time, if ever. In all other section-work, if an opiate seems unavoidable, grain-doses (eight centigrams) of phosphate of codeine may be injected hypodermically every three or four hours as required; morphine alone never.

NON-OPERATIVE TREATMENT OF IN-GROWING TOE-NAIL

A very good way to treat in-growing toe-nail when the patient does not desire an operation is to make a solution of liquor potassæ (U. S. P.) in water—two drams to the ounce:

Liquor potassæ 8.00
Water 32.00

and saturate a small bit of absorbent cotton with this. The cotton is to be pressed gently in between the upper surface of the nail and the mass of tender granulation-tissue. The alkali soon permeates the substance of the nail without irritating the sore; but the cotton must be kept constantly moist to do the work well. The softened part of the nail is to be carefully wiped off every morning. In a few days the nail will have become so thin and soft that it can be cut away without pain. The applications must, however, be continued until all granulations disappear and healing is well under way.

ANURIA AFTER OPERATIONS

Very rarely there is total suppression of urine immediately after severe operation—the exact cause of which is unknown; if the kidney-secretion is not promptly started up, death is certain to occur within a few hours. As soon as the anuria is noted, one-tenth grain of pilocarpine may be given hypodermically; this will induce almost instantly a profuse perspiration which will eliminate a certain proportion of retained poisons. Then hypodermoclysis must be resorted to, a full quart of hot normal salt-solution being thrown into the cellular tissues of the buttocks or breast. If this does not cause urine to flow into the bladder within an hour, in-

travenous injection of normal salt-solution must be made, a liter being used. In two hours this must be repeated if the first does not suffice.

SOAP POULTICES IN SUPPURATION

When there is much pain from a suppurative process like periostitis, adenitis, an abscess or forming whitlow, much comfort may be obtained from application of a soap poultice. Several thicknesses of gauze are saturated with soft soap—the green soap, ethereal soap or potash soap of the U. S. P. is best—and applied to and around the affected area and covered with rubber-tissue or oiled silk, held in place by bandages. Better is a mixture of soap and alcohol:

Green soap.....64.00
Alcohol 32.00

This is to be applied in the same way and should be allowed to remain all night. It is also a good mixture to use in synovitis.

ALKALIES FOR STONE IN THF KIDNEY

Before resorting to operative measures for stone in the kidney it is best to give large doses of potassium citrate for two or three weeks, unless there are evidences of infection by pyogenic bacteria. Patients who complain of much pain in the back, who pass bloody urine, and even those who are discharging small quantities of pus, are not infrequently entirely relieved by this course of treatment. The explanation is that the source of irritation is merely a number of small uric-acid stones; and by elimination of an excess of alkali by the kidney these are slowly dissolved or at least sufficiently diminished in size to permit their passage down the ureter. Certain it is that under this line of treatment such small stones are discharged from the bladder in some cases, with perfect relief of all symptoms. If no benefit is derived at the end of three weeks, it may be concluded either that the stone is too large to be affected or that it is not of simple uric-acid formation. The onset of fever or the appearance of much pus in the urine demands early operation.

GLONOIN AFTER OPERATIONS

When there has been great shock from operation and the patient seems about to die from syncope one one-hundredth grain of glonoin (nitroglycerin or trinitrin) may be given hypodermically. It promptly dilates the cerebral capillaries and if the the shock be purely of nervous origin—*i. e.* not due to loss of blood—a favorable change should be noted very soon. If not, a second dose may be given in ten minutes; but a third must not be injected. If no hypodermic needle is at hand the glonoin tablet may be put under the tongue, whence it is absorbed with surprising rapidity.

FOR GONORRHEAL CYSTITIS

Of decided value in gonorrheal cystitis is arbutin in doses of five grains every three or four hours. In cystitis due to other pyogenic microörganisms it is soothing but not so effective.

MARSDEN'S PASTE FOR CANCER

The celebrated "Marsden's paste" used by most "cancer doctors" consists of

Arsenous acid .....1 ounce
Powdered acacia.....1 ounce
Water .....5 drams

Some of this arsenical mucilage is smeared over the malignant growth morning and evening, care being taken not to cover healthy skin. Separation of sloughs is encouraged by poulticing, which also gives temporary respite from suffering, because the arsenic causes intense, destructive inflammation. Absorption is not possible if plenty be applied; a small quantity on a raw sufrace might lead to arsenical poisoning, but a large amount produces such severe inflammation that perfect safety is assured since inflamed tissues lose the power of absorption. But the treatment is very painful and tedious and so has fallen into

well-deserved disuse by the regular profession. One can do in five minutes with the Paquelin cautery without pain (under cocaine) what the cancer quacks require weeks of terrible suffering to accomplish.

ELATERIN IN ABDOMINAL SURGERY

After certain operations it becomes necessary to secure very early bowel movement; calomel is too slow and salines are apt to provoke vomiting. Here elaterin (the glucoside active principle of the elaterium of the shops) can be employed with the greatest satisfaction. It should be given in granules, each containing one milligram; 1-67th of a grain; one every hour until five or six have been taken or copious movements have been secured. If emesis results, the elaterin should be temporarily discontinued and one milligram of salicylate of eserine given hypodermically every hour, four times; by this the peristaltic wave will be reversed and the fecal current started downward; then the elaterin may be resumed. When black-vomit begins after operation, this is by far the most effective treatment.

REMOVAL OF MOLES

Small moles may readily be removed by the application of a solution of sodium ethylate. A drop of the solution is placed on the blemish, a scab forms, and when the scab drops off, the mole (or even a small nevus) will have disappeared, leaving only a trace of a scar.

IRRITATION FROM URINE

After operations upon the bladder, when it is necessary to leave the vesical wound open, there is always great irritation of the skin from the dribbling urine, continuing several weeks. The temptation is to prescribe some drying powder like borated talcum, oxide of zinc or carbonate of lime—all of which have been so long used in intertrigo; but if a dusting powder be used it will cake, adhere to the skin and crack, itself becoming a source of local irritation and an annoyance to the patient. Better is some greasy application—carbolized vaseline; frequent washing with a mild soap and warm water followed by an ointment of boric acid and vaseline gives the best results.

SURGEON'S ECZEMA

By reason of much hand-scrubbing, long continuance of the hands in fluids and exposure to cold air before perfect drying, the hands of busy operators are apt to become sore from a kind of dry eczema, especially in very cold weather. Applications of vaseline camphor-ice each night will prevent this; so also the use of the following:

Phenol	5.00
Oil of cade	10.00
Lanolin	500.00
Oil of rose	q. s.

This is to be well rubbed in each night, with especial attention to palmar surfaces.

INTESTINAL INDIGESTION AFTER OPERATIONS

Following certain abdominal operations (particularly those in which there is prolonged drainage of the gallbladder with external discharge of large quantities of bile) intestinal indigestion is something very distressing and persistent. In such cases prompt relief may be afforded usually by ordering a pill or granule of bilein and pancreatin with strychnine and the intestinal antiferments. A most useful combination is:

Bilein	0.01	(gr. 1-6)
Strychnine arsenate	0.0005	(gr. 1-134)
Pancreatin	0.07	(gr. 1)
Sodium sulphocarbolate	0.2	(gr. 3)
Sodium carbonate	0.2	(gr. 3)

Mix. One, two or three may be given one hour after each meal. In a day or two there will be marked diminution of

intestinal distress, with almost perfect relief as soon as the excess of fermentation can be arrested.

AN ANTISEPTIC TOOTH-PASTE

Chlorate of potash in any strength above 20 per cent will quickly destroy any of the fungi usually found in the mouth, including the germs of putrefaction. A most commendable tooth-paste is this:

Chlorate of potash	50.00
Precipitated chalk	20.00
Florentine orris root	15.00
Glycerin	15.00
Thymolin	0.20

Mix and make a paste; a little more glycerin may be added if necessary. This not only cleans and whitens the teeth but stimulates the circulation in the gums, arrests fermentation of particles of food left between the teeth, sweetens the breath and leaves a pleasant taste in the mouth.

CONDURANGO IN CANCER OF THE STOMACH

In inoperable cancer of the stomach condurangin, the glucoside which is the active principle of condurango, is worthy of trial, great improvement having been recorded under its influence. It may be obtained in the form of a granule containing one milligram (gr. 1-67th). One may be given from three to six times a day when there is the least food in the stomach; best dissolved in a little water just before taking. Small doses of sulphate of codeine should be given at the same time if there be much pain.

ULCERS OF THE MOUTH

Persistent ulcers of the mouth, not of syphilitic origin, are best treated by burning with stick nitrate of silver, with a saturated solution of chlorate of potash containing a little thymol as a mouth-wash. The burning may be repeated every two days; but few treatments will be needed. Ulcers which persist in spite of this treatment are (1) tuberculous, (2) syphilitic, or (3) cancerous, and demand careful investigation; excision of a small piece of involved tissue, under cocaine anesthesia, is justifiable in suspicious cases.

RESORCIN AS A DUSTING POWDER

Rarely from an infected wound there is too free discharge and an antiseptic dusting powder is desired. A most admirable one is

Resorcin	1 part
Boric acid	20 parts

Mix thoroughly. This may be dusted freely on the affected surface. It is much more pleasant than iodoform, yet possesses all the antiseptic value of that malodorous powder.

BROMIDES FOR DYSPHAGIA

Occasionally a child is brought to the surgeon for presumed stricture of the esophagus—"congenital spasmodic stricture" it may have been pronounced by some not-too-careful doctor. Investigation reveals the queer fact that since birth the little patient has been able to swallow solid food but that every attempt to drink any fluid is followed by choking: violent expulsive efforts, coughing, even strangling. The most careful examination reveals nothing in the way of organic cause—it is purely nervous. A few days' treatment with elixir of bromide of potash will almost invariably relieve the trouble. It may be necessary to repeat the medicine every three or four weeks for some months before a complete cure is effected.

OXIDE OF SILVER FOR HEMATEMESIS

Gastric ulcer not subjected to operative treatment may lead to alarming hematemesis. Oxide of silver is advised to control the bleeding, doses of a centigram (1-6 grain) three or four times a day giving good results when there is a tendency to slight daily recurrences. It not only acts as a local astringent but it is said to be a powerful nerve sedative—thus help-

ing to allay the nervous agitation arising from fear; and this is a most important feature of many cases.

HEPATIC STIMULANT AFTER TALMA OPERATION

After performance of the Talma-Morrison operation for cirrhosis of the liver (suturing the great omentum to Glisson's capsule and to the peritoneum) it is well to give a good "hepatic stimulant." By the action of a pill or granule containing

Juglandin .....0.005 (gr. 1-12)
Quassin .....0.01 (gr. 1-6)
Strychnine arsenate....0.005 (gr. 1-134)

free bowel movement may be secured and maintained, with much freer flow of bile than usual. It is best to begin with three before each meal, then reduce to two and finally to one. Reaccumulation of ascites may be prevented by the early and persistent use of this combination. [Our French confreres strongly advise the use of boldine after the Talma-Morrison operation.—Ed. Clin. Med.]

ANTISEPTIC DUSTING POWDER

To replace the costly proprietary articles used for dusting on wounds the United State Pharmacopeia recommends "thymolis iodidum"—iodide of phenol. It is now prepared of standard U. S. P. strength by all leading manufacturing chemists and can be obtained on prescription from all first-class druggists.

GYNECOLOGICAL THERAPEUTICS

VAGINITIS MYCOSA

Rarely the vagina becomes the seat of thrush or sprue—infection with *oidium albicans*. The mucous membrane is covered with a yellowish-white growth of parasitic origin, the specific fungus of thrush having been grafted, at first, upon some abrasion of the mucous membrane. It is especially likely to occur in a vagina affected by catarrhal inflammation the result of masturbation, the transplantation occurring by the fingers introduced between the labia. The patient complains of the discharge of "curds" like those resultant from the use of jequirity suppositories or an alum wash in leucorrhea, with occasional casts as if large fragments of the mucous membrane of the vagina were coming away. Examination shows early in the disease grayish-white spots, apparently on the mucous membrane, sometimes (but not always) elevated above the surface—but they are developed within the epithelium and well supplied with blood-vessels; so on attempted removal there is left a raw, bleeding surface. Very rarely the upper coat of the patches will drop off, leaving quite a deep ulcer. In the bad cases the patches become confluent so that a large part of the vaginal mucosa will appear covered by the fungus-membrane. Microscopic examination quickly settles the diagnosis saccharomyces or the oidium albicans being found in abundance. The best treatment consists of (a) painting the whole vaginal mucous membrane with solution of nitrate of silver (10 per cent); next (b) the use of a douche of acetic acid, one dram to the pint of warm water, twice daily for one week; then (c) introducing every evening tampons saturated with this solution:

Carbolic acid..... 0.50 (grs. 8)
Salicylate of sodium.
Borate of sodium .aa 8.00 (drs. 2)
Glycerin .....32.00 (oz. 1)
Rosewater .....96.00 (ozs. 3)

Finally (d) the use each noon, after removal of the tampons, of a douche containing two teaspoonfuls of bicarbonate of soda to the

quart of water; or borax may be used instead if the soda cause too much irritation.

ALKALINE INJECTIONS IN LEUCORRHEA

One of the most useful (and unused because so simple) injections for leucorrhea is a solution of bicarbonate of sodium; common "cooking soda," one teaspoonful to the quart of warm water. It is most effective when the leucorrhea depends chiefly upon an increased secretion of the glands of the cervix. Whenever the discharge is clear or when it is cheesy (white—not yellow) a very few injections will almost always check it until after the next menstruation, when it may be ordered again for a few days. If, however, the leucorrheal discharge is more like pus, yellow and creamy, the sodium solution will do little good; and, of course, it will fail completely if the trouble depends entirely upon a bad laceration of the cervix with thick granulations: the "erosion of the os" of the older writers—in which class of cases nothing will prove effective save repair of the cervix. The saline douche must be taken while lying down, as it is absolutely necessary that the liquid shall come in direct contact with the os uteri. If it can be used cold without great discomfort, speedier results will follow.

VIBURNIN FOR DYSMENORRHEA

A remedy which has been highly lauded in dysmenorrhea as well as a uterine sedative in threatened abortion is viburnum opulus. The most satisfactory form for practical (and economical) use is a tablet containing one centigram (gr. 1-6) of viburnin. The dose is from one to six every two or three hours as may be needed.

PRURIGO OF THE VULVA

A pruriginous eruption is occasionally found upon the vulva, either transient (appearing with the menses) or more or less permanent, as when accompanying pregnancy; in rare instances appearing only at time of confinement; and a few cases have been recorded in which it persisted for years. Examination shows that it is not, usually, confined to the mucous membrane up to the cervix; and the most aggravating cases are those in which the disease affects not only the mucous membrane of the labia but also extends backward over the perineum to and around the anus—the last-named variety being the most likely to become chronic. The irritation is so great as to interfere with sleep; and the sufferers nearly al ays say they are "nearly wild from the distress and annoyance." If it continue long the parts are apt to become much irritated by the constant scratching; the most seriously affected part of the mucous membrane turns white and thickened, and red fissures may form. The application of a hot solution of borax is very grateful, and if oft repeated may effect a cure. In persistent cases its use may be alternated with a solution of acetate of lead—the official "lead and opium lotion" being serviceable. In the worst cases severe astringents (nitrate of silver, 10 grains to the ounce, alum or tannic acid) must be resorted to.

SEPTATE UTERUS WITH DOUBLE PREGNANCY

The abdominal surgeon as well as the obstetrician should always remember that double uterus may be the source of an error in diagnosis. In a case recently under my care the woman declared herself four months pregnant; said she had always carried her children in the right side, but that this time the fetus seemed to be on each side. By an accident on the farm miscarriage was started, but not completed; for five weeks she flowed continuously and finally a little fever developed. Examination showed a sausage-shaped tumor in the right iliac region, and a similar one far over to the left, with a wide space between; pressure on each produced vaginal discharge of blood. Under anesthesia a perineal retractor was introduced and the cervix brought down, when it was seen that a sep-

tum began just within the external os. Each half was dilated and a finger introduced well into each horn. A dead fetus was found in each one, with well-formed placenta, etc. Both were removed and each half of the uterus cleaned and packed. The "tumors" have disappeared.

THREATENED ABORTION

When a woman is threatened with miscarriage the calamity may be prevented by putting the patient in bed (enjoining absolute quietude), injecting an eighth or a quarter of a grain of morphine and ordering two tablets of macrotin (each containing one-sixth grain) to be given every hour alone or in conjunction with two of viburnin, same dose. They are best taken with hot water.

TOBACCO A CAUSE OF STILL-BIRTH

The effect of tobacco on the fetus has been investigated accurately. It is now known that women who work in tobacco-factories (or elsewhere where tobacco is extensively handled) are likely to give birth to dead children, or to imbeciles, or to children who die of convulsions or meningitis very soon after birth. It is claimed that only one child in nine pregnancies will survive if the mother be a tobacco-worker. Abortions are also apt to occur. Query: Does the smoking of cigarettes have anything to do with the alarming diminution of the birth-rate of Paris; or is that due to the rapid increase of occlusion of the Fallopian tubes from gonorrheal salpingitis?

DELUSIONS OF PREGNANCY

Quite often in the last months of pregnancy the woman becomes the subject of most frightful imaginings, most pronounced after bed-time; she believes she has done something to kill her child, that the child is that of some one besides her husband, that she must murder the father of the child that it may live, that she has done something which will deform the fetus, etc., etc. In some extreme cases the excitement is so great and sleeplessness so persistent that the family becomes alarmed. A grain of phosphate of codeine, hypodermically, with a good dose of elixir of bromide of potash will relieve the first night; and subsequent use of bromide in doses of one gram (fifteen grains) two or three times a day, with a double dose at bed-time will prevent recurrence.

FOR VOMITING OF PREGNANCY

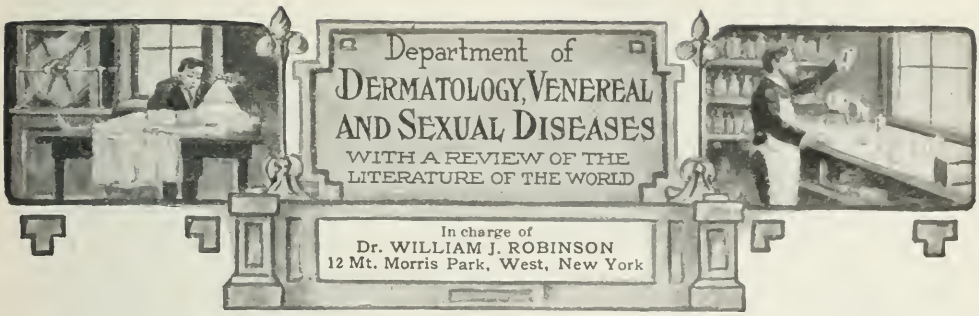
Vomiting of pregnancy dependent upon hyperacidity of the stomach may be relieved by the use of teaspoonful doses of magnesia. Emesis due to some other cause, like a hysteroid condition, may sometimes be checked by one grain of oxalate of cerium every two or three hours. Minute doses of ipecac sometimes do good. A most effective mixture is

Carbolic acid..... 1.00 (grs. 15)
Peppermint water ..64.00 (ozs. 2)

Mix. Direct: One teaspoonful every hour, or after each spell of vomiting. In the most severe forms the stomach should be washed out through a stomach-tube and one-half grain of hydrochloride of cocaine given in a capsule immediately afterward. This may be followed in an hour by a little food of proper kind for easy digestion. By doing this twice daily the patient can often be carried over to a period when the vomiting disappears spontaneously.

MUSCULAR CRAMPS IN WOMEN.

Married women sometimes complain of annoying, persistent cramping of the muscles of the legs or thighs, appearing especially at night just after sleep has come. Such patients are not benefited by either internal medicines, as a rule, nor by local applications, but may be promptly cured by repair of the lacerated perineum which is the cause of the trouble.



POLLUTIONS AND SPERMATORRHEA

Another article in the series of "Informal Chats with the General Practician." The rational treatment of this condition

By WILLIAM J. ROBINSON, M. D., New York
Editor of the "Critic and Guide" and of "Therapeutic Medicine"

IT is not necessary in speaking to an audience of physicians, or even intelligent laymen, to emphasize the fact that pollutions, within certain limits, are strictly physiologic. In fact, in a normal man, living a continent life, the total absence of pollutions would be *abnormal*. There is only one exception to this statement; men engrossed in an all-absorbing mental task, may, even while living a continent life, go for months and years without an emission. In such cases the testicles actually seem to cease functionating, temporarily. There is a very intimate relationship between the brain and the testes, and when one organ is working excessively, the other is taking a rest. And well that it is so; as otherwise the candle would be burned at both ends. But when repeated too frequently, nocturnal pollutions become pathologic.

When Nocturnal Pollutions are Pathologic

What is meant by "too frequently?" I am often asked to give a categoric answer to the question: When do pollutions cease to be physiologic and become pathologic? Well, categoric answers are not in place in medicine; there are too many "ifs" and "provideds" and too many modifying circumstances and too many exceptions. Every individual is, *to a certain extent*, a law unto himself, and of no sphere is it so true as of the sexual. What is perfectly physiologic and even necessary to one individual may be debilitating, mentally and physically exhausting, and in general extremely injurious to another individual. But, still, leaving out the exceptions at either end, and taking the average of humanity, I would say that as long as pollutions are, in an individual leading a continent life, not more frequent that once a week, they need give rise to no alarm. If they occur twice a week they are on the borderland and may, in the majority of cases, be considered distinctly pathologic, and this, without exception, even in the strongest man, and even if he complains of no unpleasant symptoms whatsoever. For there is then danger of a *pollution-habit* being established—a habit sometimes quite hard to break—with consequent impairment of *libido sexualis* and *potentia coeundi*. Another infallible symptom is this: As soon as the pollutions begin to take place without any erotic sensations, without the patient being conscious of their occurrence, they are decidedly pathologic and demand vigorous treatment.

What is the cause of too frequent night emissions? The cause of normally frequent emissions needs no elucidation. The testicles are generating a fluid which accumulates in the seminal vesicles. As soon as they become overdistended, the fluid must find an exit.

Among the causes of the pathologic emissions I consider the following as definitely established:

Masturbation (excessive, in youth), general irritability of the nervous system, a lingering, non-fully cured posterior urethritis (and the further posteriorly the inflammation is situated, the more frequent the emissions), chronic inflammation of the canaliculus seminalis and patulousness of the ejaculatory ducts, prostatitis, fissure of the anus, eczema and pruritus of anus and scrotum, and last but not least, bed-wetting in childhood.

Bed-Wetting and Sexual Disorders

I wish to devote some space to the last point, and if I succeed in impressing upon you its great importance, this chat will not have been chatted in vain. When I put bed-wetting, or nocturnal incontinence of urine, among the *etiologic* factors of pollutions, I didn't exactly mean it. I did not mean to say that bed-wetting causes pollution in after life. What I do mean to say, however, and say emphatically, is, that incontinence of urine and pollutions are closely connected and are often the expression of the same primary condition —a motor neurosis, an atony of the genito-urinary tract. I have been struck by the frequency with which subjects of nocturnal and diurnal pollutions, spermatorrhea, premature ejaculation and impotence acknowledged to have suffered with bed-wetting in childhood—so much so that I thought I made quite a discovery and was going to announce it in the medical press. But on searching through cognate literature I found that Trousseau had noticed the connection many, many years ago. So I failed to become a discoverer. Many "recent" discoveries were discovered long ago, only the discoverers don't know it.

The relationship between incontinence of urine in childhood and sexual weakness in later life is not merely of academic interest; it has a deep practical significance, and its lesson is that every case of incontinence in a boy should be treated persistently until the boy is cured. By neglecting incontinence you may be marring the whole future life of an innocent individual. Urinary incontinence is a signal that the boy's genito-urinary apparatus is not in perfect order, and it is a sin not to heed the signal.

Diurnal Pollutions

Night pollutions, diurnal pollutions and spermatorrhea form the links of one chain. They are not distinct entities, but are closely connected. Nocturnal pollutions, if too frequent and too long continued without any treatment, may become accompanied by diurnal pollutions. And it is important to bear in mind that while night pollutions may be physiologic, becoming pathologic only under certain circumstances, diurnal pollutions are always and unquestionably pathologic and require careful and persistent treatment.

And it is further necessary to emphasize the fact that day pollutions need not necessarily have any relation to, that is, be caused by anything of a sexual nature. At first the emissions are caused by mere proximity to the female sex, by dancing, bicycle riding, etc., but later on they may be caused by mere nervous excitement, by mere mental effort. For instance, I have known young men attending college who would have emissions during examinations, when they would try to recollect something, or when they would try to solve a difficult mathematical problem. I have now a bookkeeper under treatment, who would occasionally suffer with emissions whenever a mistake would occur and the figures would not tally after several attempts at correction. One patient who used to suffer with frequent night emissions got his first day emission while being cross-examined on the witness stand, and since then almost every kind of excitement would be sure to bring one on.

Spermatorrhea means the loss of semen, and we apply the term to the loss of seminal fluid when unaccompanied by sexual excitement, erection, or even consciousness. Pollutions always imply an erection, no matter how transient and imperfect, but between extreme degrees of pollutions and spermatorrhea the difference is one of degree and not of kind. In spermatorrhea the loss of semen may occur only during defecation; this is the mildest variety. If not treated, this variety may pass into the next variety, when the patient loses semen with each urination; and finally, there arrives a stage when the loss of semen is practically continuous. The meatus is almost always moist and on examining the moisture under the microscope we find spermatozoa. They are as a rule not very active or motile, may be very few in number, but they are always there.

Symptoms

Abnormal night emissions, day emissions and spermatorrhea being links of one and the same chain, the symptoms are practically the same, differing only in severity. Objectively the penis is found cold and shriveled and less sensitive to the electric current; the testicles are small and tender to the touch. The prostatic portion of the urethra is excruciatingly, exquisitely sensitive. The patient complains of headaches, of pains in the back of the head, of weakness in the *muscles of the neck* and of the spine, of a general uncomfortable sensation in the perineal region. His tongue is generally coated, he has no appetite, he is constipated, he is unable to walk up stairs or run after a car without getting out of breath, and palpitation of the heart is very common; this palpitation may occur after the slightest physical effort, after stooping, after eating, or after the slightest mental excitement. There is a general feeling of languidness and lassitude; his legs feel *hot* and *heavy* in the afternoon, and as he passes the last drops of urine, there *runs a quiver* through his spine and body (symptoms, by the way, I have not seen mentioned by any other author).

But serious as the physical symptoms may be, the mental symptoms are more so. I am not referring to the hypochondriac notions induced in young innocents by the reading of quack literature. I refer to real symptoms, which we may notice in the most level-headed persons, who are doing their utmost to fight and overcome them. The most prominent of those symptoms is a lack of concentration, inability to work steadily and continuously. A person suffering with diurnal pollutions and spermatorrhea can seldom hold a good position requiring steady mental concentration or initiative. He may work in spurts and turn out good work but he cannot do it steadily. Every once in a while his mind becomes a blank and he is then, as he expresses it, "good for nothing."

The next symptom is "lack of ambition." This is not a fanciful term, but expresses a true state of affairs. The patient does not care what happens; he does not care whether he is successful or not; he is "oversatiated" with life. These are disagreeable patients to treat, but if you handle them gently, inspire them with confidence and really improve their condition, they gradually regain the *joie de vivre* and become exceedingly grateful and obedient. Another distressing symptom is loss of memory. This loss of memory in subjects suffering with excessive seminal losses, from whatever cause, has always been an extremely interesting subject to me. It shows, as nothing else can, the intimate relationship between the brain and sexual organs. As I have stated once before, the chemical composition of the brain substance and the seminal fluid is almost identical, and the excessive drain of a vital fluid cannot but eventually affect the brain. And it is remarkable that as soon as you succeed in stopping the pollutions or the spermatorrhea, the *memory returns*. This is one of the important symptoms to show you and the patient that the treatment is really effective. For, of course, a mere improvement in the general condition, such as increased appetite, greater physical vigor, etc., is not difficult to produce in any patient.

As to the sexual condition of such individuals. The *libido sexualis* is, as a rule, diminished, though in quite a respectable percentage of cases it is increased. The power, however, is invariably diminished. The patients are not impotent, but there is almost without exception *ejaculatio praecox.*

I will not go into the causes of diurnal pollutions and spermatorrhea, as they are practically the same as those of abnormal night emissions.

A word only about "false spermatorrhea." This is applied to the discharge of a clear viscid fluid, *devoid* of spermatozoa. It is really a prostatorrhea or urethrorrhea, or both, and the term being misleading should be discarded. That it is of little significance as compared with true spermatorrhea, stands to reason. The mental symptoms which it may induce in susceptible youths who believe they are losing seminal fluid may be quite severe and distressing, but they can be easily overcome, if you succeed in gaining the patient's confidence so that he knows whatever you say is so.

The Treatment

The statement that it is the patient and not the name of the disease that is to be treated has become threadbare with use. It is true, however, and of no class of diseases is it more true than of sexual diseases. He who intends to treat sexual diseases by set formulas, by prescriptions copied from old text-books, courts failure from the outset. It is of the utmost importance, it is an absolute *sine qua non* of successful treatment, to determine the *stage* of the disease, for the remedies that will prove of great benefit in the "plethoric," irritable stage, will aggravate the condition, aggravate it very much, if administered in the atonic, "paralytic" stage, and *vice versa.*

It is so important to impress upon your mind this distinction that I will spend a few moments in illustrating my statement with one or two examples: The average practician knows in a general vague way that potassium bromide is useful in pollutions. Yes, it is. But in what stage? It is useful in healthy individuals, leading a more or less continent life and when the pollutions are accompanied by erotic dreams. In this condition the bromides are remarkably beneficial. When the pollutions occur, however, with great frequency, with very weak erections, or even without the person's consciousness, the bromides are positively pernicious. They are just as pernicious and injurious in spermatorrhea. And still they are prescribed indiscriminately. Dozens and dozens of times have I seen patients complaining that since taking a certain treatment their condition became worse. On examining their medicine I would invariably find potassium or sodium bromide.

The same is true of strychnine. Strychnine is very useful in the atonic stage, but if administered in the plethoric or irritable stage it will prove injurious. Even cold baths or cold ablutions may prove harmful and may increase instead of diminishing the seminal emissions. In short, it is absolutely necessary to individualize, and individualization of every case should be your watchword. And, by the way, these prefatory remarks will show to you how much benefit may be expected from the "lost manhood" treatment advertised by the various charlatans and harpies that prey upon the credulity and weakness of mankind.

Treatment of Three Kinds

The treatment of any case of sexual disorder must be of three kinds: moral, general and local. By moral treatment I mean explaining to the patient his exact condition, taking away his exaggerated fears, and making it clear to him that with a little patience and help from his side, he *can* be cured, completely cured. We all know what exaggerated notions—fostered by quack literature—our lay and even medical patients entertain about seminal losses. A patient who notices a drop or two of semen—which may not be semen at all, but prostatic fluid—exuding from the meatus after defecation, is sure that he is on the straight road to the insane asylum. Of course these depressed thoughts influence

his entire system and a vicious circle is soon established. When you explain to him, however, that in one normal connection he loses more semen than he can lose in the other way in a week or two, and when you explain to him that the loss of a few drops after defecation is almost entirely a mechanical phenomenon, due to the pressure of hardened feces on the seminal vesicles, to the contraction of the muscles, etc., his fears are allayed and he enters upon the treatment more hopefully. I do not advocate ridiculing the patient's fears or telling him that his condition is "nothing." The latter is absurd, for the condition is not "nothing", but it is necessary to put things in their true perspective. Always explain to the patient his condition honestly, truthfully; this will gain you his willing, intelligent coöperation—and half of the battle is then won.

The General Treatment

In night pollutions, occurring in healthy individuals, accompanied with erections and erotic dreams, the bromides are of unquestionable value. I generally prescribe 10 to 15 grains of KBr or NaBr at 4 p. m., the same dose at 8 p. m., and 20 to 30 grains on going to bed. I prescribe powders which must be dispensed in wax papers. The patient is ordered to dissolve a powder in half a glass of plain or perfectly carbonated water. Occasionally, I combine the bromide with lupulin and camphor monobromide, and in still more obstinate instances with hyoscyamine. A favorite combination of mine is the following:

Potassii bromidi.....grs. 5
Camphoræ monobrom.....grs. 2
Lupulini optimi.....grs. 5
Hyoscyaminæ hydrobr...gr. 1-100
M. f. caps. sive pulv. No. 1.
Sig.: One at 8 p. m. and one on going to bed.

Ablutions

It is here that the physician so often sins in ordering ablutions with cold water. Cold water is followed by a reaction, which as a rule increases the erections and emissions. Ablutions, if ordered at all, should be with *lukewarm* water, and should not be followed by active rubbing. Dry gently by merely applying the towel or allow to dry spontaneously. Constipation or hardened feces must be guarded against by all possible means. Cascara, saline laxative (but never aloes!), glycerin or gluten suppositories, enemata—anything to prevent constipation, hardened feces and straining at stool. Beginning at about 4 p. m., the amount of liquid should be reduced to a minimum, while alcoholic liquids should be prohibited absolutely. Smoking in this stage is rather beneficial. (As will be seen, in the atonic stage an entirely different state of affairs obtains.) That the patient must sleep on his side and not on his back, on a hard mattress, with not too heavy covering, must avoid promiscuous company, obscene literature, and must fight against lascivious thoughts, I will merely mention, as this is known even to the layman.

In nocturnal pollutions unaccompanied by any sensation, and in diurnal pollutions, not due to any local or spinal irritation, strychnine is indicated. While I start with small doses—1-100 grain—I sometimes run up as high as 1-12 grain three times a day. I often combine it with hydrastine and ergotin, as in the following formula:

Strychn. sulph. (vel valerianat.) gr. 1-30
Hydrastinæ hydrochlor .....gr. 1-4
Ergotini .....gr. 2
M. f. caps. No. 1. D. tal. dos. No. lx.
Sig.: Caps. un. bis. vel ter indic p. c.

[Of late I have been using the three drugs locally, and I have explained the exact method of employment elsewhere.] Cold-water ablutions of the perineal region are very useful and the benefit derived from them is often immediate. Instead of plain water I have been prescribing for the last ten years the following:

I.—Etheris acetici.....ozs. 1½
Ol. rosmarini .....dr. 2
Ol. origani .....dr. 2
II.—Ammonii chloridi .....lb. 1

Sig.: Put teaspoonful of the liquid and tablespoonful of the powder in small basinful (1 qt.) of water and wash with sponge

as directed, before going to bed (or night and morning).

I find that the ablution with this solution has a much more beneficial effect—both psychic and physical—and is performed more faithfully than is the case when water alone is ordered. The liquid medicine—at least the first two ingredients—were suggested to me by Prof. Fürbringer of Berlin, who is probably our best authority on the treatment of sexual diseases. In some cases where a strong stimulant effect is desired, I replace the oil of rosemary with oil of turpentine.

For the weakness, sometimes intolerable, of the neck and spine muscles, so often complained of by the sufferers from pollutions and spermatorrhea, we have three remedies: (1) Plastering the entire back with adhesive (or capsicum, or capsicum and belladonna) plaster, leaving on for 5 to 10 days; (2) electricity; and (3) painting at night, or night and morning, with the following mixture:

Chloroformi .....oz. 1
Tr. capsici .....drs. 2
Tr. belladonnæ .....drs. 6

Paint quickly once or twice with camels-hair brush.

This mixture smarts pretty strongly for a minute or two, but the effects from its use will be a revelation to many physicians. Do not paint it over the entire length of the spine; use the upper third at the first application, second third at second application, etc., and then start over again from the neck. In this way no soreness is produced. As I said before, the relief of the muscular weakness and the general tonic effect on the entire system from this mixture, are quite remarkable.

But important as the moral and general treatment is, it is but adjuvant to the *local* treatment—urethral and rectal—with which alone we can hope to attain a cure.

Local Treatment

We now come to the local treatment. As we stated before, the prostatic portion of the urethra is exquisitely sensitive in the vast majority of cases, being responsible for a large share of the symptoms. Our first endeavor must therefore be to diminish this sensitiveness. Steel sounds, or better still, Kollmann's dilators, are excellent for this purpose, but their introduction is, *per se*, so painful, and creates such spasm, that we are very often unable to use them without the employment of a strong local anesthetic. Cocaine is, of course, sure and positive in its effects; its use, however, is so often accompanied by disagreeable or even dangerous by-effects, especially when used in the urethra, that I have practically given up its use and employ some of its substitutes, generally eucaine or alypin.

I believe that instead of subjecting the urethra to repeated local anesthetizations, we can do better if we "harden" the urethra so that it loses its sensitiveness, and we are enabled to pass sounds without the necessity of local anesthesia. The best substance for "hardening"—diminishing the sensitiveness of the urethra—is and remains silver nitrate. But in its use I differ from the majority of my confreres. The usual method of instilling 10, 20 and even 50 per cent solutions I consider cruel, brutal and injurious. The reaction is often excessively severe, and I have seen excruciating pain, bloody discharge and complete retention of urine resulting from them. I use the nitrate of silver differently.

I usually start with a 1 to 5,000 and sometimes even with a 1 to 10,000 solution. I insert a soft-rubber return catheter. (Mitchell, or one with several perforations throughout its upper two inches) almost to the neck of the bladder (or within an inch from it) and inject from two to eight drams of the above solution. I teach the patient to use the catheter himself and I have him use it two or three times a day. In this strength the silver nitrate causes no pain, no strangury, no disagreeable symptoms of any kind. Gradually I increase the strength to a 1 in 3,000, 2,000, 1,000, 500 and 250. It is seldom necessary to go above that. When the patient reaches this strength, all the congestion, sensitiveness and irritability of the urethral canal are cured. *And not infrequently his trouble,*

for which he came to be treated, is cured too, We are now able to employ, if necessary. further mechanical manipulations, which *then* call forth no reaction. The urethral canal has lost its sensitiveness and can be handled much more easily than without the preliminary nitrate of silver treatment.

The Use of Sounds or Dilators

As stated above, the treatment with steel sounds or dilators once or twice a week is very useful; I will say, however, that the usual treatment—leaving in the sound for five or ten minutes seems to me of little value. I always leave in the sound or dilator for at least half an hour, and quite frequently for a *full hour*. While in the treatment of strictures the urethral dilators are in every respect superior to the sounds, in the treatment of the conditions I am speaking of, I prefer the latter to the former. Still, even here the dilator has this advantage: We can introduce it through a meatus which will not admit anything larger than 18 French. (And when in the urethra we can of course dilate the blades as far as we want to.) While if we want to use sounds and have to deal with a narrow meatus, we must perform meatotomy.

Besides the sound and the dilator, we have the cold-water urethral sound and the ice-water rectal tube. The latter is particularly useful, as it can be used twice or three times a day by the patient himself and without any fear of irritation or infection. I might add here, in parenthesis, that in cases requiring long and persistent treatment, I take the patient into confidence, invoke his aid, make him, so to say, an assistant of mine. It is only thus that success is possible in many cases. It is impossible to expect a patient to come every day, twice a day, or even every other day for treatment. If you teach him to do certain things for himself the course of the treatment will be materially shortened. Of course you must be sure that your patient is intelligent and has a clear perception of the dangers of infection, a wholesome fear of them and knows the meaning of surgical cleanliness.

Some Local Applications

Several local applications have been doing excellent service in my hands in the treatment of the various forms of sexual weakness. One of them is a combination of strychnine and hydrastine (see next article) and has the following composition:

Strychninæ sulph.	gr. 1
Hydrastinæ hydrochl.	grs. 10
Aquae destill	gtt. 400

One drop of this contains 1-400 grain of strychnine and 1-40 grain of hydrastine. By the aid of a Guyon or a Bumstead syringe one to four drops are deposited in the prostatic urethra. Another combination is:

Hydrastinæ hydrochlor.	grs. 10
Ergotini	dr. 1
Aquæ	gtt. 600

Dissolve and filter. Dose one to ten drops endourethrally.

Still another combination is:

Strychninæ sulph.	gr. 1-4
Hydrastinæ hydroch	grs. 5
Sol. adrenalini chl. (1:1000)	gtt. 100

Dose one to four minims endourethrally.

By the aid of the local treatment outlined in this chat, combined with the general treatment, both of course used conscientiously and with discrimination, the vast majority of cases of functional sexual disorders will be *cured*, while no case can fail to be materially benefited. But, risking reiteration, we must emphasize, that no case can be treated by a set formula; every case must be studied by itself—and treated by itself.

STRYCHNINÆ AND HYDRASTINE

Their use in various forms of sexual and vesical weakness. Reprinted from the Journal of the American Medical Association

By WILLIAM J. ROBINSON, M. D., New York
Editor of the Critic and Guide and of Therapeutic Medicine

I will not weary you with a long paper. I am of the opinion that a practical point which one can at once utilize on his patient with undoubted benefit, is of greater importance—to practical physicians—than a long abstruse paper, dealing with guesses and hypotheses and theoretical considerations, which may or may not possess value.

There is a very large class—much larger than one would imagine—of patients who are suffering from a weakness of micturition. I deliberately use this indefinite term. I do not refer to difficulty in urinating due to stricture, to prostatic hypertrophy, etc. No, there is a weakness without any discoverable pathologic basis; simply the bladder and sphincters have lost their tone, and the urine comes out without any force; the stream is split up into several thin streams and at the completion of the act there is considerable dribbling, which is very annoying to the patient, especially if of the better classes. As a rule there is a small amount of residual urine in the bladder. If this condition just described is not attended to, it is apt to become aggravated, leading to cystitis with its well-known symptoms and sequelæ.

The number of people suffering with sexual disorders of one sort or another is exceedingly large, so large, indeed, that only he who makes a specialty of these cases can have any idea of their frequency. But of all sexual disorders we come in contact with, by far the most common is ejaculatio præcox. It is more common than all other sexual disorders combined. To one case of impotentia coeundi or generandi, or absence of libido sexualis we have 30 or 40 cases of ejaculatio præcox. And it is as common in young men of 18 as in strong men in their prime at 35, or in elderly men at 50 or over. Into the causes of ejaculatio præcox I will not go in detail. I merely mention that those causes are numerous, the chief four being excessive masturbation, excessive sexual indulgence, neurasthenia or nervous depression and chronic gonorrheal posterior urethritis, comprising in the latter term also prostatitis and vesiculitis.

Objections to Administration by the Mouth

It is universally conceded that strychnine is the remedy *par excellence* in loss of tone and functional atony of every character. That it is of benefit in vesical and in certain stages or varieties of sexual weakness nobody will deny. But the usual method of administration by the mouth is frequently open to grave objections.

The first objection is the dose of strychnine which we must give in order to make an impression on the local condition. The administration of toxic drugs is always an evil, and, though a lesser evil than the condition for which it is given, it is an evil nevertheless, and the smaller the dose with which we can accomplish our purpose the lesser the evil. Administered internally, we must give it in doses of 1-20, 1-16, and even 1-10 grain in order to achieve results. And the drug must be given for a considerable length of time.

The second objection is that strychnine administered by the mouth acts very injuriously in a large number of cases. Many neurasthenics are very much aggravated by strychnine. I have had occasion to convince myself of this fact dozens and dozens of times. Any possibility of suggestion is

excluded. I have had many patients tell me that since they took those tablets or medicine, they being ignorant of what they were taking, they felt a heat, a burning sensation along the spine and were weaker and more irritable. Pollutions are frequently very much aggravated by strychnine administered in the ordinary way. Again, in people with good normal arterial tension, it may cause splitting headaches; it may produce diarrhea and it very often increases the libido sexualis, a condition which we, in many cases, most decidedly wish to avoid. All those considerations have led me to search for different methods and avenues for the introduction of strychnine.

Author's Improved Technic

And after many theoretical considerations and practical trials I have elaborated a plan which is giving me and my patients extreme satisfaction. The plan is very simple and consists in depositing a solution of strychnine, by the aid of a Guyon syringe, into the urethra, either just within the vesical sphincter or anteriorly to it, into the posterior urethra. But before giving the exact technic, I will state that I found a combination of strychnine with hydrastine much more efficient than the strychnine alone. The hydrastine exerts a distinctive curative action on the catarrhal or slightly congested condition of the urethral mucous membrane; its action is particularly marked when the vesical or sexual weakness is the result of chronic gonorrheal urethritis; but even when due to other causes the action is remarkably beneficial. The combination I have been using for several years is as follows:

Strychninæ sulphatis.....gr. 1 |06
Hydrastinæ hydrochloridi...grs. 10 |6
Sol. acidi borici saturatæ .....400 drops

One minim of this solution represents 1-400 grain of strychnine and 1-40 grain of hydrastine.

I have the patient urinate, wash out the urethra with a boric acid solution of 1-10,000 solution of oxycyanide of mercury. I fill up the Guyon syringe, attach the properly sterilized Guyon catheter, screw down the piston until a drop appears at the opening, and introduce it into the urethra to the spot where I want to deposit the solution. By turning the screw I deposit just as many drops as I wish to. Each turn of the screw corresponds to one drop. I seldom use more than four drops, corresponding to gr. 1-100 of strychnine and gr. 1-10 of hydrastine. And with this small dose, administered once or at the most twice a week, I accomplish more definite, positive results than with gr. 1-20 of strychnine by the mouth three times a day and every day in the week. In other words, I accomplish with gr. 1-100 to 1-50 strychnine given endourethrally more than with 1 to 2 grains administered by the mouth. And, besides, I have no after-effects. None of the undesirable accompaniments of strychnine which I have enumerated have ever made their appearance.

I do not wish it understood that this is the only combination I use. I sometimes combine the strychnine and hydrastine with ergotin, sometimes with adrenalin, sometimes with both. I also use other combinations and I do not give them here in detail because the object of this paper is not to present a detailed treatment of vesical and sexual weakness. My sole object is to call attention to the medicinal treatment of a class of diseases which are very often obstinate and in which internal treatment is either unsatisfactory as to results or as to undesirable by-effects.

Are there any cases in which this local instillation is inapplicable? I have not come across any. There is a small percentage of patients in whom the slightest manipulation of the urethra with the softest catheter, the instillation of a drop of water in the posterior urethra, will cause pain, spasm and even fever. In such cases a local anesthetic occasionally becomes necessary.

I do not use cocaine in the urethra, have not used it for years, since a disagreeable experience in which I had nearly lost a patient. I use some of the well-known substitutes for cocaine, my favorites being

the lactate of benzoyl-vinyl-diacetone-alkamin or the hydrochloride of benzoyl-tetramethyl-diamino-ethyl-isoprophylic-alcohol.

I have also used strychnine and hydrastine in the form of rectal suppositories. The results, while not equal to those obtained by the local instillation of the alkaloids, are still very good. It is well to bear in mind, however, that the rectal dose of strychnine is, by exception, smaller than the dose by the mouth. A great portion of the strychnine becomes destroyed in the gastrointestinal canal and only a small percentage remains unchanged to exert its physiologic effect. This is not the case when the strychnine is exhibited by the rectum, and gr. 1-100 of that alkaloid by the rectal route has a better effect, and without any drawbacks, than gr. 1-40 or even 1-30 administered by the mouth.

Conclusion

I wish to make a plea for the stomach. Let us let the stomach alone as much as possible. Let us reserve the stomach for food and drink, and whenever possible let us utilize other avenues for the introduction of medicine. It is true that there is no other avenue that is just as convenient, but using other avenues the action of the remedy is more clear-cut, and we can often obtain results unobtainable with drugs administered by the mouth.

And I will beg your indulgence for giving an additional illustration. We all know the great value of oleum santali in urethritis, cystitis, ardor urinæ, strangury, etc. We also know how liable it is to upset the stomach, destroy the appetite, etc. Some people are utterly unable to stand it. In selected cases I have, therefore, utilized an emulsion of oil of santal, injecting it directly into the bladder. In strangury particularly and in cystitis in general, the effect is striking, occasionally simply marvelous. And we obtain these results in a very short time, often immediately, without punishing the stomach for sins committed by another organ, without taxing and irritating the kidneys; in short, we do not upset the entire organism in order to influence medicinally one spot in it. And this is the object of this paper: attempt to treat locally all affections which can be reached by local means.

—:o:—

Pure therapeutic principles rationally applied through the use of pure drugs give unequivocally exact and desirable results—is *real* medical practice with a sharp point to it.—Ed.

STAINING SPIROCHAETA PALLIDA

The original method of Giemsa for staining the Spirochaeta pallida has recently been improved by Hoffmann and Halle by fixing the specimen in osmic acid vapor. The only drawback of this method, as well as of the original one, is the occurrence of precipitates of the stain which interfere with the clearness of the specimen. Dr. Alfred Kraus now recommends a 30 per cent watery solution of tannin as a remedy for this drawback. The specimen is prepared according to Hoffmann-Halle and then placed for a longer or shorter time in the solution of tannic acid, according to the thickness of the specimen, the length of its stain, etc. The bluish background of the specimen is changed to a light pink one, while at the same time the precipitates in the stain disappear. Under the microscope the finding of the spirochaeta thus becomes very easy, owing to the sharp contrasts.—*Muen. Med. Wochenschrift.*

A CASE OF BLENORRHEA

Dr. Sowinski reports a case in which three weeks after the onset of gonorrhea an abscess developed in the middle of the penis together with painful swelling of the left inguinal glands. The pus from the abscess contained numerous gonococci. Five days later the first phalangeal joint of the left middle finger became affected and the inflammation spread to the metacarpophalangeal joints of the hand. Finally the middle finger and thumb of the right hand were also attacked. In the course of a month the swelling and redness of the joint disappeared, but the motion was much restricted.

GLEANINGS *from* FOREIGN FIELDS

TRANSLATED BY E.M.EPSTEIN, M.D

HYOSCINE: A PHYSIOLOGICAL STUDY

A discussion of the source, physiological action and therapeutic uses of this alkaloid, to which new interest is added on account of its lately discovered anesthetic properties

HYOSCINE is found in hyoscyamus niger, of the Solanaceæ family, together with hyoscyamine and sikeranine, the last of which is totally unused. Hyoscine is isomeric with hyoscyamine and atropine, but it possesses certain physical, chemical, physiological and therapeutic properties, which are special to it, and which distinguish it from the last two substances.

Hyoscine is a base of a syrup consistency, almost solid when it is very pure. It combines with acids to form salts. The hydrobromides and hydrochlorides are almost the only ones used therapeutically. The hydrochloride is a white crystalline salt, of bitter taste, soluble in water, alcohol, and ether. Hyoscine was discovered in 1881 by Ladenburg and was employed alone by Bruce in 1886.

Physiological Action

Magnan defines its action as follows: "When we inject a milligram or one and a half of hyoscine hydrochloride into a patient who is a prey to a sharp maniacal excitement we do not at first notice any change in his behavior, but at the end of five or ten minutes, rarely more than that, the agitation becomes less, his movements lose their abruptness and rapidity,—they last not so long. At intervals of some seconds the patient is quiet, holds still, and if standing up he does not gesticulate any more. His gait becomes shaky, uncertain and ill-coördinated. His muscular debility and incoördinate movements oblige him to lie down and in fifteen to twenty minutes he can not raise himself. He tries yet to straighten himself up, but his legs do not support him and he lies down upon the floor. At the same time his loquacity becomes less, he is less voluble, and there are intervals of silence. The voice becomes more and more feeble, at times broken, trembling, and at the end of twenty-five minutes it is extinct; the patient does not speak any more, or utters a word now and then which cannot be clearly understood. General lassitude accompanies all these phenomena. When the patient sits up, his head droops on his chest, his eyelids close in spite of him, and he falls asleep. The sleep does not seem profound; he opens his eyes when you touch him, but falls asleep again. The sleep lasts five or six hours, and when he awakes he is quiet, sometimes for half an hour, but when the effect of the medicine has been dissipated, then the agitation and loquacity become again as bad as before the injection was made. There is habitual frequency of pulse, of tachycardia, dryness of the throat, thirst, and mydriasis persisting at times for three days."

Hyoscine is an antisecretory remedy, which gives good results in profuse perspiration, in alcoholic delirium and in phthisis. It is highly esteemed in asthma and whooping-cough, and as an antineuralgic it gives excellent results in paralysis agitans, chorea, athetosis, sclerosis in patches and in writer's cramp. But it is most used as a sedative and hypnotic against psychomotor excitement. It is also prescribed for various kinds of insomnia.

We are assured by Messrs. Garnier and Cololian that we can by this remedy calm cases of extreme agitation (although it is only of value temporarily) and obtain also some hours of sleep. It is a powerful sedative, to which we may resort when we have to transport a furious patient to the asylum over a long road. It is a palliative but not a curative remedy.

It is usually administered by way of the subcutaneous cellular tissues, but it can also be given per os, or by rectal enema.

The usual dose is from one-half to two milligrams. Hyoscine acts on the inhibitory nerves of the heart in the same way as atropine.

When a dog had been previously curarized, and then has received hypodermically 7 or 8, or even 5 centigrams only of hyoscine, then the heart will not be arrested when the peripheral ends of the pneumogastric are electrified with a very strong induced current.

A drop of a one per cent solution of hyoscine instilled into one eye of a rabbit or dog will produce in seven or eight minutes a marked dilation of the pupil, completely paralyzing the accommodation, then thirty minutes after that instillation the same effects are seen in the other eye, only less pronounced. On man the action is even more pronounced; the paralysis of accommodation by the same strength may last for five days in the one eye, but the other one is not affected.

Therapeutic Action

Hyoscine hydrobromide, says A. Robin, as a sedative of the nervous system is not quite constant, for at times it acts just the opposite. He thinks that small doses, judiciously administered, in cases of trembling, will give more regularity and satisfaction. In illustration he adduces a case of Parkinson's disease in a painter, who was so far cured that he could resume his labors and had only to guard against excitement not to bring on an attack. That patient was given from 1-10 milligram increasingly to 1-4 milligram of hyoscine *pro die* in the interval between December 4 and 24, 1901, when he was discharged.

Further experiments were made with this remedy in France by Drs. Lemoine, Malpilatre and Ramadier on fifty-four maniacs who had each an injection of 3-10 milligram; 38 enjoyed sleep for five to six and more hours. Usually there is no need to give higher doses, except in cases which become accustomed it may be necessary to advance to 1-2 or one milligram. In maniacs and alcoholics, Drs. Magnan and Loof give one milligram at the outset, which procures sleep for five to ten hours. The calming effect lasts for an hour or two after awakening, and agitation and loquacity come again. The effect is only temporary.

The cases in which hyoscine can be employed advantageously are acute mania, alcoholic delirium and hallucinations, anxious melancholy, general paralysis with maniacal excitement, and in the periods of agitation before and after epileptic attacks. It can be utilized with great advantage in traumatisms of the insane and generally whenever there is urgency to calm acute mania.

Dr. Magnan who considers hyoscine as a kind of specific against agitation as a syndrome, admits that it makes the gait of the patient tottering, his movements to coördinate badly, his lower extremities numb, so that the patient rises with difficulty. One maniac said after hyoscine was administered to him: "My legs will not go, my feet stick to the floor." Another one said: "I have pitch in my pants which holds me fast to my chair."

Prof. Joly of Strasburg used hyoscine in twenty-three cases of mania, melancholy, and dementia with the following results:

One-fourth of the cases got sleep at the end of seven hours; a seventh part at the end of four hours; and in a twentieth part the result was negative. In two cases in which the injections contained from .4 to .6 of a milligram the patient became pale, complained of vertigo, heaviness of the head, and no sleep. The results were better when the remedy was given *per os* instead of hypodermically. But whatever be the mode of administration of the remedy the patient soon becomes accustomed to it and the dose has to be raised. It is best then to suspend hyoscine for a few days and use some other remedy for the while.

Hyoscine provokes disagreeable phenomena in nervous diseases without any cerebral affections.

Frucher says it ought not to be used as a hypnotic until all other remedies fail, because it has a depressing effect on the entire body. Salgomendum of the Buda Pest asylum is of the same opinion, that its use is for calming alien agitations.

Hyoscine in Ocular Affections

In ocular affections Drs. Trousseau and Remy have confirmed the rapidity and promptness of the medicament. From seven to ten minutes are enough to have the pupillary dilation come to an almost effacement of the iris. Atropine, duboisine, and homatropine used in the same strength of one per cent, and the same quantity, one to three drops, do not have such an intense and rapid action as hyoscine. The duration of the mydriasis is also longer, lasting for twenty-four hours just as strongly as immediately after instillation, paralysis of accommodation being complete. The strength of one per cent is not painful and has no unpleasant reaction.

Trousseau and Remy have tried the remedy in fifty-two cases of all ages, and in various ocular affections, and found the results uniformly the same. It may be that hyoscine has a more important use in ophthalmic practice than it has been given credit for hitherto.

Rendle reports in the *British Medical Journal* the case of a young man, sixteen years of age, who suffered from chorea and was treated with bromide and chloride of arsenic without effect, and so too with morphine. The patient became debilitated, and the author got the idea of trying hypodermic injections of 3-10 milligram of hyoscine twice a day. A little time after a noticeable amelioration took place. The author then made the same injections three times daily. A week after the chorea ceased, and the treatment was stopped. The convalescence was uneventful.

Its Use Prior to Anesthesia

Dr. E. A. Robertson, of Montreal, says that a hypodermic of 3-5 of a milligram of hyoscine hydrobromide, administered before an anesthesia with ether, will prevent wholly or in greatest part the accidents which follow such anesthesia. The patient is soon asleep and remains calm so long as he is kept under the ether. The narcosis is rapid and requires but a small quantity of the ether. With this mode of procedure there is no hypersecretion of saliva or from the bronchi, things which are so troublesome in the usual etherization. Nor is there vomiting, cyanosis or muscular rigidity. The patient may be easily aroused during the twelve hours of half-sleep following after such an etherization. Dr. Robertson never had to record the least alarming symptom that might be attributed to the drug. All the inconvenience it leaves at all is dryness of the mouth, and thirst. [The author fails to discuss the later and more modern methods of hypodermic anesthesia, especially the use of the combination of hyoscine, morphine and cactin.—Ed.]

It is well to remember in this connection that Dr. S. Marx of New York extolled, some years ago, the action of this drug in cases of accidents after cocainization of the spinal cord. (See *Semaine Medicale*, 1900, p. 406).

Hyoscine hydrobromide may also prevent the vomiting, after chloroforming, according to Dr. Stewart, as reported in the Austrian (Australian?) *Medical Gazette*. The drug seems a specific against post-

chloroform discomfort, provided the injection is made before the patient awakes. The dose required is half a milligram. Under these conditions there is nothing to fear. Dr. Stewart's observations seem to be conclusive.

From the above it will be seen that hyoscine is a medicament of high activity, which should be handled cautiously, small doses at the outset, not exceeding a quarter of a milligram hypodermically, and we would not advise to use the syringe except when the stomachal administration is impossible. Otherwise we advise one-fifth of a milligram, which is Houde's granule, then gradually rising, if necessary, to two, three, four, and even six granules. (Abbreviated from Houde's *Revue Therapeutique des Alcaloides*, March, 1906).

TRANSPLANTATION OF HUMAN OVARIA

Kramer's attempt in 1896 to transplant the ovaria of brutes led Frank to try the same transplantation of a healthy piece of a human ovarium into the stump of a resected Fallopian tube of the same patient, and Frank observed subsequent pregnancy in two such cases. H. Cramer, of Bonn, subsequently tried to transplant the ovaries of different women into each other, for which he used two women who were castrated in order to be cured of osteomalacia. He used three modes of operation:

First, he planted the split ovaria, stroma on stroma, expecting to facilitate the growing together in this way. Another ovarium he stitched to the back part of the uterus at the insertion of the broad ligament of the same woman, after denuding the serosa at the place. The first operation was a complete success. In the second patient Cramer stitched one ovary to the peritoneal abdominal wall on the right side of and below the longitudinal incision made, and the second ovary he stitched to the posterior side of the right broad ligament, where the place was denuded of the serosa before the stitching, so that an abraded surface be presented for the growing together. Ten weeks after the operation not a trace could be felt of the transplanted ovaries through the very thin abdominal walls of the patient. This showed, that a mere abrasion of the surface was not sufficient to secure a proper nutrition for the growing of the two surfaces together.—*Muench. Med. Wochens.* 1906, No. 39.

AN INSOMNIA CURE

Insomnia may take place after a few hours of very good sleep. Dr. Num attributes this to a trouble in the cerebral circulation and cures it by "forced inspiratory movements," by which the reflux of the blood from the brain to the heart is facilitated. Especially contributing to this effect are the costoscapular muscles. The shoulder-blades being carried back completely by eight to fifteen full inspirations will induce sleep again. There is not the least harm or danger involved in this method. [And the writer of these lines is able to say "*Probatum est*" from his own experience.]—*Lancet*, March 17, 1906.

STERILIZATION OF WATER

Water can be sterilized completely by the addition of tachyol (*Argentum fluoratum*) 1:500,000. It forms at once a turbidity caused by the insoluble silver salt which is soon precipitated. A quart of water will need gr. 1-6, and the salt is perfectly indifferent.

There is no special apparatus necessary, and the process is economical: Two or two and a half grams (grs. 30 to 40) of a one per cent solution of fluor silver (tachyol) is sufficient to make fit for immediate use one cubic meter (more than a cubic yard) of impure drinking water. (*Phamacut. Centralhalle*, No. 2, 1906 pr. 32.)

A HALF CENTURY OF DISPENSING

A discussion of the dispensing question, based upon a long experience, with a review of Dr. Fussell's paper in the Journal of the American Medical Association

HAVING read with profit the interesting article that appeared in the editorial department of THE AMERICAN JOURNAL OF CLINICAL MEDICINE, for January, on the intricate problem: "Is Dispensing for the Advantage of the Patient?" I became very anxious to obtain a copy of the paper that constituted the basis of the review.

Through the courtesy of the publishers of *The Journal of the American Medical Association*, I obtained a copy of this periodical, containing a very clever disquisition on "Dispensing versus Prescribing," which had been presented at the annual meeting of this fraternity by Dr. M. H. Fussell, of Philadelphia.

In a quotation from an article by Billings the doctor advanced a patent fact: "that mixtures put out by manufacturing firms, especially when such compounds contain on their labels the various diseases for which it is a specific, are just as objectionable as various secret remedies in which we are not certain of the exact proportions of the various ingredients."

The practician employing such remedies, or actuated by such precepts, has ignored the physiological action of drugs or the important facts of applied therapeutics. Consciously or unconsciously, he has drifted away from the fundamentals of the schools into empiricisms—"He has lost his tag."

A few years ago a manufacturing pharmacist sent to a physician, in one of the upper counties of the state, a lot of tablets, without the name of the product or that of the maker. He related the incident, a short time afterward, to a "drummer" possessing an elementary idea of the empiric, who essayed a solution of the problem in the following language: "Doctor, you occasionally meet a patient laboring under some disease in which the diagnosis seems somewhat obscure. In such a contingency, give some of these tablets." The sequel is not revealed.

As the reviewer of "Dispensing versus Prescribing" has responded only to the first division of Dr. Fussell's article, the doctor will have an opportunity to throw up fortifications to resist the forthcoming controversial fusillade.

In my childhood days, when the teacher sought to infuse into my cranium a little idea of penmanship, I had placed before me a copy of the aphorism, "many men, many minds." The diverse sentiment relative to the subject under discussion reveals the evidence of its truth today. In the recognition of the wide scope of its influence in various directions, I enter "the open door" with no intention or aspiration to quiet the waves of this troublous sea. My labors in the pursuit of the healing art have always afforded me ample oppor-

tunity not only to dispense but manufacture the majority of my medicaments—fluid extracts, tinctures, syrups, etc.

Dr. Joseph Carson, whose memory I revere, was Professor of Materia Medica and Pharmacy in the University of Pennsylvania. In the memorable week of examination for the degree, in taking an account of cellular stock on hand in the cerebral cortex of the candidates, he may have entertained views akin to those advanced by Dr. Fussell, that dispensing is better adapted for those "who have been improperly educated." Any defect in this direction could not attach to the distinguished professor of this branch of medicine. My examination was almost solely confined to pharmacy and the attention demanded of its study revealed the importance in which it was held at that time.

I located in a country village, where as Dr. Fussell claims, dispensing was absolutely necessary, but I do not agree with him, that "few men can possibly compound their own prescriptions....they are not skilled." I have never learned and cannot conceive that any more skill is requisite to compound a prescription than to write it properly. I write my prescriptions and then compound them. The one is a facsimile of the other. While I have had a love of pharmacy—esthetic pharmacy—I disclaim the possession of any more prestige than attaches to my dispensing contemporaries. The dispenser, in the matters of mistakes in compounding, has an advantage over the pharmacist, from the fact that his mind is directed by the symptomatology of the case and the opportunity that is frequently afforded to digest the etiology, the morbid condition and the principles of applied therapeutics, while passing from the residence of one patient to that of the other.

A change in the condition of the patient from day to day frequently demands a slight modification of the prescription, which can easily and speedily be met by a resort to his pocket medicine case without any additional expense. In equity, I assume a physician is compensated and should be satisfied solely by his fee. In the consciousness of this conception, and without assuming it to be in harmony with that of other dispensers, it has been my custom to charge simply the retail price of the drugs entering into the composition of the prescription.

The statement advanced by Dr. Fussell that "the infirmity of age overtakes almost all drugs kept in the stock of a dispensing physician makes them prohibitive" is true, but the average mind will not accept the idea that deterioration takes place any more rapidly on the shelves of the dispenser than on those of the pharmacist. The interests of both lie in the purity and effectiveness of the drugs employed, and actuates them to procure only what is needed before this infirmity takes possession.

I heartily assent to the proposition of Dr. Fussell that "a rapidly growing practice does not by any means prove that the physician is a good one or that he will do good work." A village in this state furnished an illustration of the truth of this statement. Two physicians resided there: one highly educated and cultured in ethics, an active member of the county medical society, and familiar with the current professional literature of the day; the other a man who read little, had a large practice and a fine reputation, but was unsocial, and incomparable with the former in the fundamentals of the healing art.

"The simple life," the dignity and professional courtesy, that were characteristic features of the physician decades ago, have been swept aside by the strenuous condition and commercialism that have become dominant factors, even in the pharmaceutical and medical circles of the day.

In concluding this cursory review of Dr. Fussell's paper, I question whether dispensing, while a source of benefit to the patient in every respect, is financially advantageous to the physician aside from securing some degree of assistance in the way of commendation.

I read with pleasure the discussion that followed the reading of the article, which indicated the variant views, that are entertained by the profession in its entirety. In

the face of existing circumstances, it seems surprising that either Dr. Fussell or Dr. Jump should make the statements that dispensing is bad for the patient, who will not recover so rapidly from the use of ready-made pills and mixtures as he would from prescriptions freshly prepared. To a certain extent this is undoubtedly true. I had at one time some tablets of the tincture of the chloride of iron, which I could not reduce to powder in an iron mortar. From age, tablets and pills become less and less soluble and should be "cast out into outer darkness." However, if Philadelphia is a type of this city, in which an examination of the shelves of the drugstores reveal a representation of pills and tablets seemingly of about all of the manufacturing concerns in this country, its pharmaceutical establishments possess no advantage over the dispenser's sanctum.

Dr. W. D. Calvin, of Fort Wayne, Ind., truly said: "The young physician who dispenses will derive more benefit from materia medica than one who writes his prescriptions." In addition to this knowledge, he will become more proficient in prescription writing—will devise handsomer preparations from observing some little incompatibility, even if it does not detract from its physiological action. In Indiana Dr. Calvin states: "The practice of dispensing is growing, and growing very rapidly." This sentiment, doubtless, applies, to a greater or less extent, throughout the union. "In our county, state and national societies," Dr. Calvin, says "we do not find the men who are dispensing inferior to those who are writing prescriptions, nor do we find their results inferior."

Dr. Fussell in closing said that men in his neighborhood when they started to practise medicine, started to practise decent medicine.

"Decent medicine" certainly embraces professional etiquette, the avoidance of substitution, the administration mainly of single medicaments, aside from what is requisite to modify any unpleasant effect, and the use of a vehicle to render liquid mixtures pleasing to the eye and taste.

They should be pure, and purity is nowhere more apparent, effective and attractive than in the alkaloidal preparations susceptible of being utilized in granules, solutions, elixirs and syrups in accord with the dictum of the medical attendant.

In the pride of the medical profession, let us cherish the memory of the galaxy of noble men, who have graced the centuries and in life and death exemplify the sentiment of Longfellow:

"Lives of great men oft remind us,
We can make our lives sublime;
And departing, leave behind us
Footprints on the sands of time."

LEWIS S. BLACKWELL.

Perth Amboy, N. J.

THE DISPENSING PROBLEM

The subject of dispensing one's medicines, in the course of his practice, evidently is of a perennial nature and one which would seem to furnish food for intelligent discussion at most any time. I see that it is before the meeting of the family at present, and so any of us can enjoy the privilege of having "our little say" regarding its "pros and cons."

As there is apparently no fixed standard from which to "take reckoning" or "precedence" to which we can refer, the most equitable way to treat the subject would seem to be from the view of one's own personal preference. There are many factors with which to reckon and each has its bearing on the choice of conduct of the follower. The location of one's practice, whether it be city or country, whether among well-to-do or poor people, its proximity to ready supplies, his relations to the pharmacist and his knowledge of pharmacology should all be carefully considered before one decides upon a career of dispensing or prescription writing.

I believe that a physician should establish his own individuality, and from the time he hangs out his shingle should be himself and no one else, and imitate no one. "*Esse quam videri*" should be the motto of us all, and, for this reason, in so far as it is possible, I believe that every new practician should

decide the important question of whether he is going to provide his patients with the most of their medicines, or whether he is going to have them buy them on his orders from the neighboring druggist.

Influencing us in making this choice, it seems that we should consider first the interests of our patients and then our own in the matter. There is no point of argument open to the first consideration, for, reckoning from any view we may take, the patient will be far better off if the physician supplies the remedy (provided that the dispenser knows how to handle his medicines). He will have just what the physician wants him to have, he will have just enough to correct the present trouble, he will have it at a less expense, and when he wants more he will have to return to the physician for another supply and not to the druggist. The physician keeps in constant touch with his patient and the patient cannot have a chance to forget his doctor. The great danger of writing prescriptions is the tendency on the part of the patient to pass them along to the other members of the family and friends and this, of course, does not do the physician a whole lot of good, especially when all of these people go to the druggist and get their refills whenever they want to.

As to the matter of refilling prescriptions, we cannot stop it, and it is foolish to entertain any idea that we can, for the prescription is unquestionably the property of the patient and he can take it to whom he pleases and have it filled as often as suits his fancy.

As to the relation of the physician and pharmacist in the matter, that should be considered from the view of their own preferences. If a physician is going into a new place to locate, wishes to receive the coöperation of the druggist to help him increase his practice, there is no choice left for him but to favor said druggist with all the prescriptions that he can consistently write. If, on the other hand, he wishes to receive the good-will of his patients, and has the "starch in his spine" to endure the enmity of this same druggist, his wife, and all her friends, why, he can start in on a dispensing career. If he is in the city doing a transient office business, he should of necessity dispense. If he is in the country where all the tact he has must be exercised to keep everybody in good nature, he should keep in with the druggist; for just let me whisper from experience, that that town "poohbah" can do things to a new doctor in the shortest space of time imaginable, which will make this young scion of Hippocrates weep in anguish.

In fact, it would seem that, view the subject as we may, there is only one conclusion upon which all can agree, and that is that for those who still adhere to the older methods of prescribing such procedure must be followed as best suits their individual conditions. Physicians practising in a locality where conditions are ideal both as to prices and collections cannot well advise those who are practising in places where everything is far from this ideal. And again the necessary conditions under which some physicians practise do not admit of any choice in the matter; they must dispense whether they wish to or not, if they have any success with their cases.

To such, however, as feel like gradually embracing the methods of medication which are fast coming into vogue in the form of alkaloids or specific tinctures, those of us who are using these remedies can give words of good advice, which will apply to all conditions at all times. Get the books written by Doctors Waugh, Abbott and Shaller, read them carefully, think over them and then get a small line of the alkaloids and use them in your practice. Once well acquainted with the efficiency of these little messengers of health and the dispensing problem will be easily disposed of.

CHARLES E. BUCK.

Boston, Mass.

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The spirit of this letter suits us exactly. The doctor "should be himself and no one else" and under no circumstance does the opportunity for self-assertion come earlier in his career and more decidedly than in solving this problem. As we have repeat-

edly said, there are many conditions which may influence the doctor's decision. Some of these Dr. Buck has pointed out. We agree with him absolutely on every point. —Ed.

DISPENSING: ITS ADVANTAGES

Benefits to Patient

1. Prompt relief.
2. Economy.
3. Accuracy.
4. Privacy.
5. Mutual confidence.

Benefits to Doctor

1. Convenience.
2. Accuracy.
3. Confidence gained.
4. Prompt action.
5. Facility and economy of change.
6. Privacy.
7. Profits.
8. No repeats (unless so desired).

To both patient and doctor the benefit, in the majority of cases, is identical. Should we desire to make a change, we can easily replace one remedy with another; should we have dispensed too much of any remedy, without loss to either doctor or patient we can return the unused granules to our "grip" and substitute any other which may be needed.

How often have we seen bottles and boxes of medicine discarded when less than half used, with consequent loss to the patient and often to us. Possibly at certain times we may have wished to alter our treatment but were really deterred by this fact.

Again, how often are our prescriptions purloined or at least exposed to the scrutiny of some unprincipled brother; and I regret to say there are those who turn such knowledge to their own advantage, instead of asking a consultation regarding prior treatment. Should our remedies not work, the other man knows "where he is at" without the formality of a "consultation."

How often are your best prescriptions stolen? I know of at least one physician in our town who died I might say in poverty, and yet one of his prescriptions was put on the market by a certain company which has, to my certain personal knowledge, within the past ten years realized at a moderate estimate over twenty millions of dollars.

As to accuracy in dispensing our prescriptions and copying our directions, I always write mine in Latin. I've been fortunate so far in detecting some cases where, had I not carefully scrutinized the prescription, the result would have been disastrous, not from overdoses always, but generally from too small a dose to be of any value.

As to "counter prescribing," I flatter myself that we "in Canada" have as competent and honest a class of druggists as any in the world, yet I doubt if there is one in ten who will not prescribe if there is a dollar in it. I have often, and what physician has not, avoided serious trouble by covering up their errors for them.

Again, while we may be forced to give away a small portion of our drugs at times, at others we gain thereby, as we can naturally ask for a fee, which we could not easily do were we merely to give a prescription.

All in all—dispense. It pays.

I have much more I would wish to write but am really ashamed—I am a new subscriber, this is my first effort. A long introduction you will naturally say, but it is only an "introduction" should you wish to hear from me later.

J. W. Wheeler.

Cornwall, Ont.

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We hope that Dr. Wheeler will consider himself properly "introduced" and that hereafter his calls will be frequent. We want all the new subscribers to feel that these columns are *theirs*—a place to give help as well as to obtain it.—Ed.

AN ANSWER TO DR. FUSSELL

Is dispensing for the advantage of the patient as well as for the doctor?

Dr. Fussell is not the only one who has brought up this question in the past few

years. He, as well as the others who have brought this before the doctors, are no doubt talking about a subject about which they know very little or nothing. If Dr. Fussell would take the trouble to investigate, he would find that all the homeopathic physicians, with few exceptions, are doing a large amount of work, more than the non-dispensing physician, and that their patients are generally of the better class.

What are the reasons for the public to be better satisfied with the dispensing physician?

First, because the physician has his medicines with him for immediate use, so that they need not go to a drugstore and wait for an hour or two until it is compounded.

Second, the patient has more faith in the medicine given by the doctor, because he knows that he is getting what the doctor wants him to have.

Third, by giving your own medicine, you avoid delay and substitution, which are great drawbacks to prescription writing.

Fourth, the intelligent people of today know that many doctors get from 35 to 50 per cent from the druggists for the prescriptions which they send them, thereby robbing the patient by charging exorbitant prices so as to give a profit to both doctor and druggist.

Fifth, the dispensing physician can charge a fee larger than the non-dispensing, and the patient will gladly pay it, because he knows he is paying an honest fee for honest treatment; and patients also observe that they get well more quickly under the hands of the dispensing doctor, especially if he is an alkaloidal doctor.

Sixth, the dispensing physician can control his practice better than the non-dispensing physician.

In my experience I have had patients get refills of the prescription made for "Mrs. Brown's" rheumatism, because it cured her; while others would get their own babies' prescription filled for Mrs. So and So's baby, for colic and diarrhea; and someone else will peddle around his favorite cough mixture, as prescribed by his own doctor, to about a dozen friends, thereby robbing the doctor of his legal fee by not coming to him for treatment.

Thanks to the alkaloids and active principles I do not have this occur to me now, for by giving my own medicine the patients are compelled to come to me for treatment and also for renewals of the medicine, for which I can charge a fee; and instead of the patient's getting it renewed to give to their friends they send them to the doctor for treatment, whereby he gets a fee and an increase of the number of patients. This has been my experience as well as thousands of others, especially of the alkaloidal doctors, as the people soon learn that by the alkaloidal treatment they get better quicker than by the old way of taking nasty and nauseating doses of the crude drugs of our fathers.

Especially is this the case in treating children, and how they love to see the doctor with the little pills which so readily dissolve in water and can be sweetened with a tablet of saccharin. In giving calomel, how easy it is to give in the form of a tablet of calomel with aromatics. By giving the little ones nice-tasting medicine you gain prestige among the children, and you soon notice your practice growing, because one mother tells the other how they like you and how easy it is for them to take your medicine; and as your practice grows among the children, so will it grow among the mothers, fathers, brothers and sisters.

Now to close, I can only say that it is impossible for anyone to talk over this question intelligently unless they have had experience in the same, and for anyone to criticize what he knows nothing of, is folly.

W. F. RADUE.

Union Hill, N. J.

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That's the way it strikes us! About the best judge of the relative merits of dispensing and prescribing is the man who has tried both, and having no axe to grind in the way of special favors, or no special interests to consider except those of the patients and himself, arrives at an absolutely impartial decision. One interesting

feature about this discussion is the large number of old druggists, like Dr. Stuver, or of pharmaceutical graduates, like Dr. Buck, who know both sides of the question thoroughly, and who have come out as enthusiastic dispensers.—Ed.

TO PRESCRIBE OR DISPENSE, WHICH?

Having tried both ways and to a considerable extent knowing the advantages and the disadvantages of both, I will give you the benefit of my experience.

My first practice was in the country, where I had to furnish all my own medicines; then in the city, where I did a prescribing practice for some years; and for the last fifteen years I have furnished everything I use. After all these years I am thoroughly convinced that for me and my patrons it is best for me to dispense everything for them.

The advantages of the prescription doctor are many. First, he has less expenses, and, secondly, the subsidy he gets from the druggist for whom he prescribes and the percentage on prescriptions in the way of office rent and otherwise, amounts to considerable. The druggist and all his friends work late and early for the doctor who sends the prescriptions to his place. Many persons go to the drugstore to inquire for a doctor; and the druggist sends them to his doctor, the one who prescribes for his store. The influence of the druggist and his friends is a big help to any doctor, as the former meets the whole community, face to face, sooner or later. He may say nothing against the dispensing physician, but he never recommends him or mentions him in a complimentary way to anyone. On the other hand, *his* doctor is constantly being brought to people's attention in some way or other and always defended and recommended.

Being associated with and around the drugstore, one meets many people with whom he would never come in contact in any other way. The prescribing man charges just as much per visit as the dispensing man can; as we are all, in a great measure, fee-bound.

All the druggists and their friends are acquainted with all the people, and they all pull together against the dispensing doctor. This is no little matter to pass over with a wave of the hand and a don't care air; it counts hard against us, or for us, as the case may be.

Now, for the dispenser. First of all, I think he does better work on the average, and occasionally saves a life by being prepared; and frequently gives much quicker relief by having a well-filled case of the active principles ever in his hip pocket. So, when the prescriber would resort to his syringe, the dispenser, by having his remedies ever with him, would not use his hypo. I don't use my hypodermic syringe once in three months on an average; but always have two well-filled medicine cases in my pocket: one of Abbott's small 9 vial cases, always filled with active-principle granules, and a larger one carrying twenty-four two-dram vials, also filled with the best and most potent drugs. So it is very seldom that I am not prepared for nearly everything. Add to this, a small vial of chloroform, and you are prepared for quite a fight anywhere.

Now, the money side: The prescriber has the advantage of what the druggist pays him direct in cash. The druggist will deny this, but in 90 per cent it is absolutely true. I know of what I speak. He has what he saves by not buying his medicines, he has what he gets out of the people sent him by the druggist and his friends, whom he would not otherwise get. To recapitulate, he has:

What the druggist pays him in cash or otherwise.

What the medicines would cost.

What the druggist's influence is worth.

What more he makes out of his patient by not doing the best work; or, in other words, what the patient looses by the doctor's not being prepared on the spot—all of which the dispenser looses.

How is it with the dispenser?

He gets those who want a doctor simply because he furnishes his medicine. These are confined to no class. The wealthy are

more afraid of doctor's bills than the poor and try just as hard to get along without him.

He gets what the druggist gets from the filling and refilling of prescriptions.

He gets the advantage that comes from having his patrons come to him when they need his services.

He picks up a great many dollars of those who have not enough money to pay both doctor and druggist.

The dispenser never starts an endless chain that goes all over the country and never dies, to the serious detriment of the entire medical profession. He never makes patent-medicine fiends nor drug habitues.

I have not written one prescription in fifteen years; and, by keeping my knowledge to myself I have patients in almost every state in the Union, who have used me at some time and moved away, and send to me for medicine such as they got years ago. I send them the medicine, but never the prescription; so I hold many of them wherever they may go. They are satisfied, and so am I.

The dispenser is less liable to make mistakes than the prescriber, as he is more familiar with how the drug should look and taste; and where there is any doubt, he is liable to taste and by this means find out whether it is too strong or not. This, the prescriber cannot do; and very frequently his carbolic acid solution is way too strong, as I had occasion to observe only recently, when one of them had prescribed a carbolic acid mouth wash for his salivated patient, and burned his entire mouth white. The pharmacist had let this go by him too, not knowing by the number of drops on the prescription blank how strong it would be. Had either of them just touched the tongue to the solution they would have held it up for a change.

"Furnish everything or nothing" is my motto. Join hands with the druggist and go after business that way for all there is in it, or furnish everything and never prescribe. When we try to curry favor both ways we get the worst of both and the benefits of neither.

Never give away prescriptions or sell them either to persons moving away. Let them send to you for medicine, or employ the doctor where they may happen to stop. Don't cheat yourself and the whole medical profession by so doing.

A slip-shod, lazy, careless doctor is the same whether he writes prescriptions or furnishes his medicine. "Cheap skate,"—the expression is only used by the doctor who is falling behind in the race and wants to justify himself in some way. Seeing the other doctor is leaving him, he gets resentful and—"cheap skate." The people never use the expression regarding the doctors.

Talk about controlling the prescriptions. There is only one way; that is, never write one, and there will never be any controversy about who owns it. Keep what you bought so dearly with your time and money, that is, your knowledge, for your own use and benefit. Sell it to those able to pay, and give it to the very poor; but do not let Tom, Dick or Harry carry it around in his vest pocket on a little slip of paper. Furnish it to your patrons in a bottle of your composition, for his immediate ailment, and no more. When patients want any more for themselves or their "uncle in Oregon" they will have to come to you for it.

The same doctor can, if he will only fix himself for it and try, make more money, make it easier and do better work when he furnishes his remedies, than by using the drugstore.

M. E. Johnson.

Pittsburg, Kan.

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What we especially like about Dr. Johnson's presentation of the subject is that he presents both sides, and gives the results of his own experience.—Ed.

CAULOPHYLLIN IN RIGID OS

In one of the numbers of Clinical Medicine I noticed that one of the brethren failed to obtain any results from the use of caulophyllin in rigid os. Only a short time ago I had a chance to observe its specific

action, and so I cannot help but speak a word in its favor.

One evening at 10 o'clock I was called to see a woman who was ill and as the party who left the message did not give any information of the nature of the trouble, I took my No. 7 alkaloidal case along, and hurried to the house. But to my surprise, on arriving there I did not find a woman suffering from some acute illness as I expected; no, but one in labor. Not being prepared for such a case I made an examination, found the head low but os very rigid and pains very irregular and not strong. So after giving directions what to have ready on my return, I hurried to my office for my "grip" and proceeded to the house once more.

On reaching there, I found the same state of affairs, the pains weak and irregular and the os as rigid as ever. I waited awhile to give the woman a chance, yet the condition remained the same. I concluded to try caulophyllin, as this certainly was a chance to try its virtues. I started by giving two tablets which were repeated in fifteen minutes; this I continued for three doses. After three-quarters of an hour from the time of the first dose the pains got strong and regular and the os began to soften. The woman told me these were the first strong and regular pains she had had, notwithstanding she had been in labor many hours.

Things continued in fine shape, the os dilated, and in two hours from the time of the first dose the child was born and dressed, also the mother's toilet was made, and there were no lacerations of any kind and the woman was not even fatigued. The uterus contracted firmly. There were no after pains of any kind.

C. J. Becker.

Wilkes Barre, Pa.

—:o:—

Probably no remedy which we have is more useful than caulophyllin in these cases of slow labor due to rigid os. It brings about relaxation of the parts, after which the pains almost invariably become more regular and effective. Many reports similar to Dr. Becker's have come to us. The rare cases of failure are usually traced to misapplication of the remedy.—Ed.

BEST IN THE COUNTRY

Like some other things Clinical Medicine grows better with age. I have read it for ten years. Best in the country.

Ira A. Marshall.

Ironton, Mo.

WAS IT TYPHOID FEVER?

I have carefully read Dr. Meyers' article in January Clinical Medicine, giving his results in typhoid fever, and feel inclined to make a few remarks concerning the same.

I, also, am a user of alkaloidal methods in the treatment of typhoid (I gave my experience in last year's Clinic, p. 1279), but I confess that the doctor is away ahead of me in results and diagnostic acumen.

How a doctor can make a positive diagnosis of typhoid, and have his patient up and well (or nearly so) in six days, is to me not understandable; and with modern diagnostic methods in all cases, inconceivable. Because a patient has fever (even 106°), diarrhea, headache, tympany, prostration, etc., does not prove that it is typhoid. It may well be an acute indigestion or intoxication; but when he is well in six days, typhoid, never!

There are no positive signs or symptoms of typhoid that occur this early: no roseola, splenic enlargement, and rarely a Widal reaction.

Then, from the natural history of the disease, in the absence of diagnostic clinchers, are we justified in calling this typhoid? I think not. It may or it may not be typhoid. If it is typhoid, it will be far from well on the sixth day, regardless of treatment of any kind.

Perhaps the doctor may call these aborted cases; but aborted what? So long as a positive diagnosis is impossible, so long is it unwise to use the word "aborted," for we don't know what we aborted; and

many times just such cases get well in spite of the doctor.

J. M. Heyde.

Walnut Creek, O.

—:o:—

Dr. Heyde's remarks again show the necessity of making every statement strictly "net." If an item gets into the Clinic which is broadly open to criticism some one is sure to pick it up—and we are glad of it!

Of course Dr. Heyde is right—technically. In the first few days of typhoid fever an absolutely certain diagnosis is impossible. But—if the doctor has a series of cases presenting absolute identity of symptoms with those of a professional neighbor, in the course of a typhoid epidemic, and if the latter's cases all develop into unmistakable typhoid, while the former's run but an abbreviated course, is it not at least reasonable to assume that they *may* be first-stage typhoid, arrested by energetic treatment at the period when such treatment should do the most good? We think so. In case we have typhoid fever sometime we will gladly waive the certainty of diagnosis, for the reasonable certainty of relief from that obscure "something" which no one seems willing to put a disease ticket on as yet—except to say that it *isn't* typhoid.

We all remember Dr. Heyde's splendid report of experience with the sulphocarbolate treatment of typhoid fever. There was no question of diagnosis in this series, for the most careful diagnostic technic was employed. His results proved the value of intestinal antiseptics in a way that *must* carry conviction to the thoughtful. Of 26 cases treated expectantly 4 died, giving a mortality of 15 2-5 per cent; while of 54 cases treated with sulphocarbolates only one died (a pauper case seen first on the tenth day), giving a mortality of 1.8 per cent. That shows what can be done in *undoubted* cases of typhoid fever. Refer back to the October, 1906, Clinical Medicine and read the entire article. We wish other members of the "family" would record their cases with equal care and give us more such reports. Why not commence now?—Ed.

THE TREATMENT OF PNEUMONIA

It is with mixed pleasure and disgust that one reads of the opinions of the different writers on the subject of treatment of pneumonia; pleasure for the hope and encouragement given by many who treat the disease successfully, and disgust for those who claim "there is no known treatment," most prominent among the latter being a well known surgeon of the city of Chicago.

When one sees the enormous mortality from pneumonia in the hospitals of our large cities he is not surprised to hear of such statements being made. Nor should he be surprised at the great mortality when the mode of treatment generally followed out by such men is known. Who would expect the average case of pneumonia to recover when treated internally with some of the coal-tar preparations, whisky, digitalis, strychnine and oxygen, while ice, a cotton jacket or Denver mud is used as an external application?

The treatment that I am about to outline I have followed for the past eighteen years, with the result that I have had but two deaths, one in a protracted drunkard with double pneumonia, the other a case of organic heart disease with acute nephritis. The first thing I do is to begin with oft-repeated doses of calomel, gr. 1-10, until free bowel movement results, following with a saline to complete flushing of the entire alimentary canal; and this in turn followed with some intestinal antiseptic, preferably the sulphocarbolates of zinc, sodium and lime. In children I always have used high enemas of normal salt solution.

To relieve the pain and aid free expectoration nothing in my judgment is equal to the external application of heat, to be applied continuously so long as there is any pain or evidence of consolidation.

As to internal medication I rely solely on the fl. ext. of ergot in twenty-drop doses every hour for the first three doses and

then every three hours until temperature remains normal for at least twenty-four hours.

The next, and what I consider the most important factor in the successful treatment of pneumonia, is fresh air and plenty of it. In treating a case in midwinter I prefer to have the patient in a room without a fire and with the window raised. My most successful cases have been those kept in rooms where the temperature was below freezing; the patient is kept warm by hot-water bottles to the feet and heat applied to the chest.

It has been my experience that cases seen early and treated as outlined may be aborted, the temperature dropping to normal on the third or fourth day, no evidence of consolidation presenting after the fourth day.

Now, gentlemen, I can hear you firing your questions at me, asking the whys and wherefores. My answer to you is—that I know from observation and long experience that cases so treated *get well*, while about 40 per cent of the cases treated in our large city hospitals *die*.

Since I began the use of ergot I never have seen a case where the area of consolidation made a particle of advancement after the second or third dose. Neither have I found it necessary to resort to the use of strychnine or digitalis to sustain the circulation and whip up a tired-out heart.

I never have had a single case develop low muttering delirium when they were kept in a cool, well-ventilated room and the bowels kept in a clean, sweet condition. In my judgment the majority of deaths from pneumonia are caused by the absorption of intestinal toxins and the want of cool, fresh air.

I was first lead to the use of ergot in the treatment of pneumonia on the theory that it would contract the blood vessels and act as a general circulatory stimulant. Late observations have proven the theory to be correct and further, that it slows and strengthens the heart's action, diminishes the amount of blood in the central nervous system and increases intestinal activity.

As to cool, fresh air, I have always believed that when you have a portion of the lung tissue consolidated nothing will aid the balance of the lung tissue to fight off the steady advance of the disease like fresh air. I have seen, in consultation, many patients gasping for breath, respiration rapid and shallow, delirium, with dull and sodden mental state, upon being moved from a hot, poorly ventilated room to one where the temperature was below freezing, at once brighten up, lose the dull expression and improve in every way, until complete recovery replaced what seemed a few hours before certain death. The open-air treatment is now being used at the Presbyterian Hospital in New York City with the most gratifying results.

I offer you these suggestions, gentlemen, and say to you: "Experience and not theory prove that patients so treated usually recover."

A. B. Wyant.

Winfield, Kansas.

THE NEW SURGICAL ANESTHESIA, WITH REPORTS OF CASES BY THE HYOSCINE-MORPHINE METHOD

The medical and surgical world rejoiced when, in 1846, Morton demonstrated that the abolition of sensation could be effected by the inhalation of ether. Two years before, and about the same time afterward, Wells and Simpson were using, respectively, nitrous oxide gas and chloroform for the same purpose. Each of these agents has been a blessing and boon to humanity. However, among the many advances in medicine and surgery there is none perhaps more notable nor more likely to triumph and survive, than the discovery made this present year that hyoscine and morphine, when pure and combined in proper proportions and administered hypodermically, will as safely and effectively anesthetize a patient, and for a much longer period of time, than can be done by chloroform or ether or any other anesthetic.

To Lanphear, of St. Louis, and to Abbott, of Chicago, is due the credit for the intro-

duction of this wonderfully successful method of producing general anesthesia. And while the latter physician has been often criticized for his seeming dominant spirit of commercialism, one must praise him for the brave, bold stand he has taken against therapeutic nihilism. Dr. Lanphear states that he has used his method in over three hundred capital operations without a single failure, and that he has become so devoted to it that he has practically abandoned the use of chloroform and ether in operative cases, excepting in the very young and the very old, the extremes of life being unfavorable to morphine.

The profession is more or less familiar with the experiments that have been made from time to time with scopolamine as an anesthetic agent, but the results have varied and not a few deaths have been recorded therefrom, so that Abbott conceived the idea that scopolamine alone was dangerous and that it must contain something else which produced the anesthesia. Knowing that hyoscine was present in the drug, he concluded to try it in its chemically pure form. He selected the hydrobromide of hyoscine, which was free from atropine and atroscine, and combined it with morphine sulphate (free from thebaine) and cactin, the latter for its cardiant property. With this combination the results were satisfactory, and today many surgeons in this country are using, with perfect success, the hyoscine-morphine-cactin compound, and to the practical exclusion of all other anesthetics where general anesthesia is required.

It is of paramount importance that the ingredients used be pure and obtained from reliable druggists; otherwise there may be disappointment. Abbott's tablet contains hyoscine hydrobromide, gr. 1-100, morphine sulphate, gr. 1-4, and cactin, gr. 1-67. To anesthetize a patient it is recommended that two hours before operation the first tablet should be given and the second tablet after the patient is on the table, or about fifteen minutes before operation. Rarely the third tablet may be required, especially in the robust or where an extensive operation is to be performed. In the latter case the first tablet should be given three hours, and the second tablet two hours, or an hour and a half before operation. The third tablet then can be given, as in every case, when the patient is put on the table or a few minutes before. Anesthesia will always be complete when the surgeon is ready to operate. The above directions how to use the anesthetic are those suggested, and followed, by Dr. Lanphear himself, and were followed by me in the three cases now reported, as also in the fourth case which I am able to report through the kindness of Dr. Holladay, of Portsmouth, Va.

Case 1. *Appendectomy.*—Miss B. M., age 17, American. Operation four hours after diagnosis of catarrhal appendicitis. First tablet 10 p. m.; second at 11:15 p. m.; slight movements of legs when skin incision was made; few drops of chloroform inhaled; anesthesia then complete; appendix removed and patient slept profoundly until 5 a. m., awakening free from pain, nausea and shock, and wanted breakfast. *Speedy recovery.*

Case 2. *Amputation of Thigh.*—Miss A. D., age 19, American. Sarcoma of head of tibia due to injury received by falling from bicycle six months before operation. Pathological report made by Dr. J. W. Hunter, of Norfolk. First tablet at 10 a. m.; second at 11 a. m.; operation begun at 11:20 a. m. Few whiffs of chloroform required, as patient was somewhat wakeful, though analgesia was complete. Amputation at lower third of thigh; no movement observed. Patient awakened an hour after operation in good spirits, laughing, talkative, free from nausea, pain and shock, and did not know operation had been performed. Satisfactory recovery, but metastases may occur.

Case 3. *Amputation of Thigh.*—Mr. B., age 22, American. Medullary disease of tibia, necrosis, etc. Lower third amputation. First tablet at noon; second at 1 p. m. Operation begun at 1:30; complete anesthesia; bone sawed twice, but no movement, yet patient was a little wakeful and drank water while the arteries were being tied in the stump. Satisfactory recovery.

Case 4. *Carcinoma of Breast.*—Mrs. A., age 38, American. Complete removal of breast with glands of axilla; forty-one stitches required to close. First tablet at 11 a. m.; second at noon, few drops chloroform; complete anesthesia at 12:30, when operation began. Patient slept several hours after operation and awakened free from pain, nausea and shock. Uneventful recovery. Too early to predict outcome.

Since these satisfactory results were obtained by the use of the method, the naval surgeons at the Naval Hospital, Portsmouth, Va., some of whom were present when the above operations were done, have operated on some hernia cases, and they state that they find it admirably suited to their needs. Surgeon-General Rixey has asked one of them to prepare a report for the benefit of the Navy.

With reference to its use in obstetrics, I cannot speak, as I have not had any experience thus far, but those who have used it here are loud in their praise of the compound. It is said that in addition to rendering labor painless, it does not interfere with uterine contractions.

There are very few *precautions* to be observed with respect to its use. I would mention the following:

The stomach and bowels should be empty, because it may be necessary to change to another anesthetic before completion of the operation.

Silence must be preserved in the operating-room; noise makes the patient restless and wakeful.

Tie the hands and feet.

I am not certain, but perhaps the method cannot be used with morphine habitues on account of their tolerance of that drug.

The effects noted are: Some excitement after the first tablet, later a dilated pupil, and after the second tablet the pupils are midway between dilation and contraction. Deep sleep supervenes, often with loud snoring. Occasionally patients talk throughout the operation, but there is no pain, and although they can be aroused, the anesthesia or analgesia will last several hours. The respirations may drop to twelve, ten, eight and even six a minute, without harm, provided they are regular and the face presents a good, bright, red appearance.

The discoverers of this method of producing anesthesia caution that if it becomes necessary to use other anesthetic to supplement its effect, chloroform, and not ether, should always be employed. No explanation for this is given, but it is probably on account of, and for fear of, excessive kidney congestion, which morphine produces.

If the patient attempts to move during operation he should be told in a loud voice to lie still, that no one will hurt him. He will then obey.

Advantages of the method are: Entire absence of shock and freedom from pain, nausea, etc. These are valuable *desiderata*. A patient cannot always escape either of these conditions after other anesthetics have been used. These facts seem to prove that post-operative shock is due to the kind of anesthetic administered, and not to the operation itself.

No assistant is needed when hyoscine-morphine is the anesthetic, thus eliminating a part of the expense of operations. Thus economy is a factor.

Lastly, when we can free patients from the fear of operations by robbing the operations of their disagreeable accompaniments and harmful after-effects patients will be more willing to realize the benefits which surgery is ever ready to offer them.

M. Monroe Moran.

Pinners Point, Va.

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We take pleasure in reprinting this valuable contribution to the literature of the h. m. c. combination from the *Virginia Medical Monthly*. Dr. Moran's paper was read before the Seaboard Medical Association, held at Wilson, N. C., December 12 to 14.—Ed.

HAS A PATERNAL FEELING

I really have a *sorter* paternal feeling for Clinical Medicine. It's *our* paper. I have read it so long, and find so much

good in every number, that I pray God to bless you in its work.

W. G. Courts.

Reidsville, N. C.

HYPODERMIC ANESTHESIA: THREE CASES

I have taken a great deal of interest in the reports published in Clinical Medicine concerning hyoscine-morphine-cactin comp. as a general anesthetic. Some time ago I bought one hundred of the hypodermatic tablets and have used them whenever possible. Now I will relate my experiences with this form of anesthesia so far:

Case 1. J. S., Male, age 25. Laparotomy. Injected one tablet hyoscine-morphine-cactin, one and one-half hours before operation. As this was my first experience with the new anesthetic, and as the patient's condition was very grave, I gave but one injection, and supplemented it with chloroform. The patient's respiration and heart action were all that could be desired; and only a small quantity of chloroform was necessary to keep him properly anesthetized. After operation the patient slept soundly for about three hours, and when he awoke there was no nausea or vomiting.

Case 2. J. D., male, age 28. Herniotomy. Patient's circulatory and respiratory apparatus normal. Gave one hyoscine-morphine-cactin tablet, by hypo., two and one-half hours, and a second one hour before operation. The patient was soundly asleep when ready for operation, but awoke and struggled when placed on the table; soon went to sleep again, but the abdominal muscles did not relax, and as soon as an attempt was made at incision the patient struggled so much that a little chloroform had to be given. The patient breathed badly and was slightly cyanotic from the first. Just as the hernial sac was isolated and ligated, the patient ceased breathing, in spite of all the watchful care of two careful assistants who were watching the "head-end" of the tablet.

In all my life I never saw a man so cyanotic; his face, neck, and even his fingers were very blue, while his lips and tongue were almost black. Respiration had ceased completely, although the pulse still beat rapidly and feebly. The operation had to be abandoned for the time being, while we four adopted heroic measures to restore respiration; the patient's head was dropped about three feet lower than his feet, the tongue drawn well out, and the angle of the jaw pulled forward; the anal sphincter was divulsed; artificial respiration was carried on; strychnine and atropine were administered hypodermatically; and still the man refused to breathe, and kept getting more and more cyanotic. Finally a gauze sponge was wet with aqua ammonia and held before his nose, while artificial respiration was maintained regularly; soon he gasped, and after about ten minutes after cessation of respiration, the patient resumed breathing.

The operation was completed, and was successful in every way; but the patient continued cyanotic long after he was returned to bed. That was the "scariest" case I ever had the misfortune to run up against.

Case 3. J. M., male, age 22. Appendectomy. After my experience with case 2, I used only one injection of hyoscine-morphine-cactin in case 3, and supplemented it with chloroform, only a small quantity of the latter being necessary to keep the patient well under. Respiration and pulse were fine in this case.

In these three cases, I noticed several things with which I was much pleased.

First, the patient needed but little chloroform, when the latter was preceded by hyoscine, morphine and cactin; second, the patient enjoyed a sleep of from two to six hours after the operation, and awoke feeling much better than those who had not had the h. m. c.; third, there was little or no post-operative nausea and vomiting; fourth, in these three cases there was no shock following the anesthesia.

But the extreme cyanosis and complete cessation of respiration, in Case 2, almost

put a stop to my use of the new anesthetic. What is the reason for trouble such as I had with Case 2, when using hyoscine-morphine-cactin? I notice that others are having the same trouble.

I have not yet had a chance to use this new anesthetic in obstetric practice, but shall give it a trial at the first opportunity.

I have used hyoscine-morphine-cactin, by hypo, in cases of severe pain, especially in nervous patients, and like its action much better than plain morphine, or the morphine and atropine combination.

While I am writing, I want to speak about another matter: I use quite a lot of the intestinal antiseptic (compound sulphocarbolates) in my practice, in gastrointestinal troubles, and in the majority of cases the patient has complained that the tablets caused him to vomit. I am sure of the genuineness of the preparation. I have tried various ways of giving the intestinal antiseptic, but always I hear the complaint of its inducing nausea and vomiting. Sometimes I have had the patient chew and swallow the tablets; sometimes they were given in powder form; sometimes in solution, with essence of pepsin as the vehicle, and a little ac. hydrochloric dil. added. Now, what is the trouble? Patients complained of nausea and vomiting when only one or two tablets were given at a dose.

I have been reading THE AMERICAN JOURNAL OF CLINICAL MEDICINE, and its predecessor, THE ALKALOIDAL CLINIC, ever since my first year in college, and am heartily in favor of active principle medication, and use the active principles every day; but this is the first letter I have written you for publication, and I think it is long enough; so will quit now, and "come again."

W. C. WOLVERTON.

Linton, N. D.

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This is one of the few, the *very* few cases in which unfavorable results have been reported from the h. m. c. combination. As we have said before we want *all* the truth about this new anesthetic, for in this way only can we learn to understand it thoroughly and use it most efficiently. It would be inconceivable that a powerful remedy like this, used by all kinds of men, in all sorts of cases and under all sorts of conditions, should not be potent for evil as well as for good. The details of technic, its special field of usefulness, and its limitations must be worked out by experience. In the very few cases where its results were not all that could be expected (and it is astounding how few these cases are) a few words of explanation usually put the doctor right.

We referred Dr. Wolverton's letter to Dr. Lanphear, who makes the following illuminating comment:

"The trouble in Case 2 is easily recognizable: First, too much chloroform was given, and second, the anesthetist watched the pulse instead of the respiration. In giving the small amount of chloroform needed when only two injections are made the inexperienced anesthetist invariably uses four or five times the quantity necessary. When the operator is ready to begin—and then only—a few drops of chloroform are to be given by inhalation and the effect on respiration carefully noted—the pulse will take care of itself; as soon as the patient snores or has only costal respiration the chloroform must be discontinued and not a drop more is to be given until the patient becomes restless.

"For abdominal operations the chloroform will be needed: (a) for skin-incision; (b) when the peritoneum is pulled on; and (c) sometimes for closing the wound. The man accustomed to the administration of chloroform cannot realize, at first, how little of that drug is needed as a supplement to the h. m. c. tablets (except in robust men who drink heavily). Another important point is that doctors are entirely too prone to use chloroform from a bottle which has been opened for some time; it ought always to be from a freshly opened bottle, and is almost sure to produce symptoms of respiratory paralysis if not. Finally, in herniotomy, it is far better to use local anesthesia induced by beta-eucaine then

chloroform, after injection of the two doses of h. m. c. tablets."

This exactly agrees with our own observations and we think will serve to answer the doctor's question. This is almost the only report of respiratory difficulty reported, and by far the most severe—and this was undoubtedly due, as Dr. Lanphear says, more to overdosing with chloroform than with hyoscine. No deaths attributable to the anesthetic.

Now regarding the sulphocarbolates. Once in a while a patient is affected in the way the doctor describes, but in all my fifteen years of experience with this preparation, I don't think I have ever met half a dozen cases. Personally I take two, three or four, followed by a glass of water, without the slightest inconvenience. Perhaps you don't use water enough. In tablet form, without water or in concentrated solution, they will often produce nausea, but used in conjunction with plenty of water there is, as a rule, no trouble whatever. Try these suggestions, Brother, and tell me with what success you meet.—Ed.

A CASE OF TETANUS TERMINATING IN RECOVERY*

The cases of tetanus ending in recovery are of such rare occurrence that this one occurring in St. Mary's Hospital in the service of Dr. H. O. Walker is deemed worthy of reporting. Besides this fact, there are several points in the case which make it especially interesting.

History.—Master D. A., aged 10, a Russian-Jewish immigrant, had been in America only six months, and was selling newspapers on street cars, November 13. On alighting from one car he stepped in front of another coming from the opposite direction, was run over, and had both legs terribly mangled. He was hurriedly brought to the hospital, where examination revealed a compound comminuted fracture of the right tibia and fibula and lower third of the femur. The skin of the left leg had been torn off *en masse* from the posterior two-thirds of its surface and from the juncture of the lower and middle thirds of the thigh above, to the ankle below, only hanging by its inner border. Body surface cold, eyes bright, pupils dilated, child conscious and in great pain. Considerable hemorrhage from right leg; blood and serum oozing from denuded area of left leg. Temperature 96.4°F., axilla, pulse 118 and weak, respiration 18.

A tourniquet was fastened around each thigh, a hypodermic of strychnine and morphine administered, and the patient surrounded by hot bottles.

Upon the arrival of Dr. Walker, the child was anesthetized and both legs were thoroughly irrigated with 1-2000 bichloride solution and cleansed as thoroughly as possible. The dirt of the street had been ground into the wounds to such an extent, that, naturally, the cleansing was very unsatisfactory. They were then wrapped in wet bichloride dressings and bandaged, with tourniquets *in situ*. A saline transfusion of thirty ounces was administered under the skin of the pectoral regions and the patient put into bed to recover, if possible, from the shock., After twelve hours of vigorous stimulation, the temperature in axilla was 100.2°F., pulse 140, respiration 20, but his general appearance was better.

It was deemed best to repair the injuries at once. Under ether, the right leg was amputated in the middle of the thigh and the skin of the left leg drawn into position and sutured there with silkworm gut.

Nov. 15. Axillary temperature 100.8°F., pulse 140, respiration 22.

Nov. 16. Axillary temperature 100.8°F., pulse 116, respiration 24.

Nov. 17. Axillary temperature 101°F., pulse 120, respiration 22.

By this date all of the skin of the left leg which had been placed back in position had sloughed and was removed. For the next two days the temperature continued from 100° to 101°, and then fell to 99°F. The patient had recovered largely from the combined shock of the accident and operation and was apparently doing nicely.

*From the January Leucocyte, the official organ of the Alumni Association, and published by the Alumni and Students of the Detroit College of Medicine.

During the afternoon of the twentieth, the eighth day after the injury, the boy began to complain of slight stiffness in the lower jaw and refused nourishment. By 6 p. m. the trismus was marked, patient only being able to open jaws wide enough to admit of placing a lead pencil between the teeth. The diagnosis of tetanus was made and a supply of antitetanic serum sent for. At 9 p. m. 20 Cc. of the serum was administered intravenously. Once in twelve hours also eight minims each of carbolic acid and glycerin was given subcutaneously, alternating with the serum, thus making an administration of one or the other every six hours. A *pro re nata* order for one hyoscine morphine-cactin tablet containing hyoscine hydrobromide, gr. 1-100, morphine hydrochloride, gr. 1-4, cactin, gr. 1-67, to control the spasms, was left. Nutrition was maintained by means of nutrient enemata.

After the first four days, for three succeeding days, the administrations of the serum were changed from intravenous to subcutaneous and then discontinued altogether. The carbolic-glycerin injections were still maintained until fourteen days were past. After the eighth day of the disease, the temperature fell from 99° F. axilla to normal and has remained so.

After the second day following the operation, the left leg had to be manipulated for one-half hour daily while it was being dressed. When the leg was raised from the bed, the stiffness, which seemed continuously present, became slightly increased. It was impossible to bend the knee or flex the thigh on the trunk without lifting the patient's whole body.

The position habitually assumed by the patient was one of stiffness or very slight opisthotonos. Contraction of the posterior cervical muscles held the head slightly tilted backward; the back was slightly arched and apparently the child rested on his elbows; the abdominal recti were tense; contraction of the tibialis posticus, gastrocnemius and peronei muscles extended the left foot on the leg, while contraction of the tibialis anticus caused an exaggerated arching of the foot. At certain times, with or without stimuli, the patient would utter a slight cry of pain, orthotonos would be increased, and even a position of s ight pleurothotonos would be assumed.

With the room darkened, all extraneous noises excluded, and the administration of the tablets of hyoscine-morphine-cactin, no dangerous convulsions occurred. On the sixteenth day after the onset of the symptoms, medication and nutrition were resumed by mouth. During the next four days, five grains each of chloral and sodium bromide, by mouth q. i. d., kept patient quiet, and by the twentieth day after the onset all signs of the disease had disappeared. At no time during the twenty days was it necessary to give more than one tablet daily to keep the patient quiet, except on four days, when two tablets were necessary.

The patient now has every appearance of health. He has a voracious appetite, is rapidly gaining in weight, and laughs almost continuously with his little fellow-sufferers in the ward.

Just how much of the result is due to the antitetanic serum or to the carbolic-glycerin injections used, of course cannot be judged, since both were used conjointly. Several facts about the case are noteworthy, however.

1. That the patient recovered. The prognosis of the disease is usually tersely expressed by the Hippocratic aphorism that "the spasm supervening on a wound is fatal." The wound in this case and its attendant shock were of the most severe character. Statistics place the mortality in traumatic tetanus at 80 per cent, and Yandell claims that of all cases of tetanus the mortality is greatest in children. Generally considered, favorable conditions are: "Late onset of the attack, localization of spasms to the muscles of the face and neck, and absence of fever." (Osler) From these facts, the prognosis appeared to be very bad. The child was only ten years old and suffering from the shock of a severe accident and operation; the onset was early (eighth day); the spasms were generalized; fever was present, though probably more

as a result of the absorption of septic products. Notwithstanding these unfavorable indications, convalescence from the combination of accident and tetanus is progressing rapidly.

2. The exacerbations of the symptoms as mentioned by the classical writers were especially marked. One day a condition of almost remarkable quietude would exist, to be followed on the next by an increase in the excitability.

3. Orthotonos, or rigidity of the trunk and limbs, was not interrupted, but was almost continuous.

4. While pleurothotonos and exacerbations of the symptoms apparently came on without obvious stimuli, manipulation of the leg in dressing it caused very little increase of the spasm except in the facial muscles, giving rise to the typical risus sardonicus.

5. The potency of the hyoscine-morphine-cactin combination in controlling the spasms.

While the administration of antitetanic serum was begun as soon as the symptoms were sufficiently marked to render a diagnosis possible, the influence of it and of the hypodermically administered carbolic-glycerin medication on the return to health of the patient are questionable, to say the least.

Even the most optimistic advocates of serum therapy in this affection deprecate a successful result from the employment of antitetanic serum when once the symptoms of the disease have manifested themselves. Its efficacy is lauded as prophylactic rather than curative, although no true physician, I believe, would omit its use, even after the disease is well established, realizing that in tetanus he is dealing with a powerful adversary, and one which is very apt to carry off its victim in spite of any therapeutic measures we may institute.

Death from tetanus is due, it is claimed, to either exhaustien of the patient from repeated convulsions, or from the prolonged paralysis of the respiratory muscles during a convulsion.

In this case, it is the consensus of opinion of Dr. Walker and the members of the resident staff, who daily watched the progress of the little sufferer, that to the sedative tablet of hyoscine-morphine-cactin is due genuine credit for averting a catastrophe from either of these causes, and for the successful termination of the disease.

C. M. Stafford.

Detroit, Mich.

—:o:—

The above interesting report from Dr. Stafford, house physician of St. Mary's Hospital, Detroit, originally published in our bright little contemporary, the *Leucocyte*, and afterwards revised by the author, is of exceeding importance, and will, I am sure, be read with much interest. To become an essential in the successful treatment of a case of tetanus is certainly another "feather in the cap" of Abbott's anesthetic tablet, which bids fair to be ranked as one of the most important and useful therapeutic discoveries of the day. It is not only the named drugs entering into this combination, but the purity of the same and the accuracy of the method of their combination—not "any old thing" will do. See Dr. H. O. Walker's reference to this case in connection with his extensive experience reported on page 365 of the March issue.—Ed.

SEVEN CASES OF NEW ANESTHESIA: ALL FINE

I report herewith my experience with the morphine, hyoscine and cactin combination. First, as a tranquilizer.

1. Mrs. E., was given one tablet hypodermically one and one-half hours before general anesthesia, for amputation of the cervix uteri. She took the chloroform easily, requiring only one dram. There was no nausea nor soreness following the operation.

2. Mrs. W. Trachelorrhaphy. The hypodermic was used one hour before the anesthetic; I used only two drams of chloroform. There was no after nausea nor pain.

3. Mr. H., for double turbinotomy. Hypodermic of h. m. c. one hour before anesthetic; did not measure the choloroform but the same gentleman was anesthetist

in all and he wondered at the exceedingly small quantity of chloroform used in all of these cases.

4. Mrs. G. Uterine curetment. The h. m. c. injection was given one hour before ethyl chloride, one gram, and the patient experienced no pain and made a rapid recovery.

5. Miss B. Turbinectomy both sides. Hypodermic of h. m. c. one and one-half hours before the operation and a second one one hour and fifteen minutes after. In half an hour after we had to use chloroform. In this case there was some excitement, with a sinking sensation after the first but not after the second injection. Also, after the first a straining and bulging of the eyeballs; subsequent history free from pain and there was very little hemorrhage, but two days after, dysuria gave trouble for a few days and there was complete suppression of urine for twenty-six hours.

6. William S. A hypodermic of hyoscine, morphine and cactin was given and in thirty minutes he was sound asleep. I removed a small growth from his larynx. He said he just felt something in his throat but, "Oh no, didn't hurt any, just felt you feeling it."

7. Miss B., another patient, not the same as No. 5. Gave one of the anesthetic tablets hypodermically and another in two hours. In thirty minutes there was complete anesthesia. She slept soundly for three hours and on awakening asked if the operation was over. I opened the leg over the radius and scraped the bone.

Altogether, there is much satisfaction in its use. What intervals should intervene between the first and second injection and how soon after the second should one be able to operate, as a general rule?

I report these cases because you ask for reports to assist in tabulating. If you desire more I'll gladly supply reports as I have made a farther and extended use of the anesthetic.

I may say that my nurses, who have worked in other institutions with a fair amount of surgical material, are delighted with the results while the patient is on the table, and especially with the ease in the nursing after operation.

W. T. Harrison.

Keene, Ont.

—:o:—

We hope that we may have that farther and more extended report of Dr. Harrison's experience, which like so many others that we receive is very satisfying. For operations which are not very severe two tablets usually suffice. The first is to be given two hours prior to the time selected for operation and the second an hour to an hour and a half later. At least half an hour should elapse between the second tablet and the commencement of operation. In very severe operations three tablets may be necessary, the first being given a little more than two hours prior to the operation, the second about an hour before and the third a little before the patient goes on the table. In some cases a little chloroform may be needed but don't make the mistake of giving too much; usually a very few drops will be all that is necessary.—Ed.

FIRST EXPERIENCE WITH HYOSCINE, MORPHINE AND CACTIN COMPOUND

Was called to see Mr. H., 27 years old, at 5:30 a. m. Found him suffering from a spasmodic pain in the left hypochondriac region. The abdominal muscles were very rigid. I thought I could palpate a bunch of something in the colon and sigmoid. When he was not rolling, tossing and howling with pain, he would assume a half-sitting posture, which would relax the abdominal muscles some and give him, he said, a little relief.

He was so frantic it was impossible to keep hot applications on him. I gave 1-4 grain morphine and 1-200 atropine, repeated in thirty minutes; then in one hour 3-4 grain morphine and 1-100 atropine hypodermically, without any relief. Internally I gave specific dioscorea in half-teaspoonful doses every fifteen minutes but got no results. After waiting two hours longer (in the meantime I returned to my office and found the morning mail had brought me

a tube of your hypnotic anesthesia tablets) I gave him one full-strength h. m. c. tablet hypodermically. In fifteen minutes he was asleep and had no return of the trouble. During the next twenty-four hours I gave him three seidlitz powders and several enemas, and finally succeeded in emptying his bowels. In two days he was walking down town.

J. W. Kannel.

Fort Wayne, Ind.

—:o:—

No "enlargement" is necessary. This is a distinct case of superiority of h. m. c. over the usual anodyne mixtures, an experience which is being repeated by increasing hundreds daily.—Ed.

ACONITINE: A NEW IDEA TO ME

I have been using aconitine during the past twenty years and was of the opinion that I knew pretty near all that was to be known in relation to it; but—I have just had an experience with a mixed lot of symptoms, in connection with a case of grip with bronchorrhea as an attendant—excruciating headache and facial neuralgia—no elevation of temperature—that opened my eyes.

I had frequently prescribed aconitine in neuralgias in combination with atropine valerianate with good results, but these were sthenic cases, while the case in hand was asthenic. Being puzzled, I called my friend Dr. Abbott to see my case and he at once suggested a full dose of aconitine. His suggestion was contrary, under the circumstances, to my own ideas; but my confidence in his experience is unbounded, so I administered two granules of aconitine, amorphous, gr. 1-134, and in ten minutes (on his further advice, with his finger on the pulse to note the effect of the aconitine, by that time approaching very nearly the maximum) I gave two of digitalin, gr. 1-67, and two of strychnine arsenate, gr. 1-134; when in fifteen to twenty minutes more relief was complete.

After two hours, according to his further direction, I gave one each of the foregoing (the "dosimetric trinity") and continued the treatment during twenty-four hours, alternating each hour with calcidin, gr. 1-3, for the bronchorrhea. Relief of the acute condition was almost immediate, as stated, and after twelve hours a decided improvement of basal conditions was manifest, which continued. After the twenty-four hours was completed a tonic treatment of iron, quinine and strychnine with nuclein was instituted ("triple arsenates with nuclein") and improvement continues.

This is a new one on me, and I give it to the readers of Clinical Medicine as a reminder that we all have something yet to learn with reference to the positive active principles and their definite applications to disease conditions.

W. T. Thackeray.

Chicago, Ill.

—:o:—

I appreciate the doctor's compliment very much. The *raison d'etre* was simply this: There was peripheral spasm of the vasomotors with internal paresis, my suggestion being the quickest way to establish a balance and keep the patient on her feet. There are of course other ways to accomplish the same result, but I know of none so quick, so pleasant and so sure.—A.

HYOSCINE-MORPHINE-CACTIN IN OBSTETRICS

I wish to report another case in which the new anesthesia worked fine.

The case was one of confinement, the thirteenth for that mother. The woman complained of unusual soreness at the lower right quadrant of the abdomen and labor was rather slow. At 6 a. m. I gave the first h. m. c. hypodermic; at 7.30 gave the second. She was unconscious at 7.50 a. m. and at 8 a. m. was delivered of the child; very little loss of blood but the placenta was very adherent; could not get it by Credé method, but had to introduce my hand in the uterus and work for for some time and use quite a good deal of force to loosen the placenta. I finally got it all away and had no after trouble.

The patient awoke at 11.30, asked for me and would not believe she was yet delivered until she saw the child.

The patient wanted to get up the third day and on the sixth day did get up and has been doing her work ever since. She has ten children at home and does the work alone. The husband says they never saw the mother get along so well before.

H. L. Imus.

Zeeland, Mich.

THE MEDICAL ERA

We learn from Dr. Clarence Martin that he has acquired the *Medical Mirror*, made famous by that genial, big-hearted and brilliant man, the late Dr. I. N. Love, and consolidated it with the *Medical Era*. The new journal will be known as the *Medical Era*. The April issue of the *Era* will be the first number of the combined journal, which, with the strength coming from increased circulation and widening of editorial connections, is sure to be a "top-notcher."

We extend congratulations to the new-old journal, for which we predict a brilliant future. Its publication office is 3530 Franklin Avenue, St. Louis.

BRONCHOPNEUMONIA IN A BABY SIX WEEKS OLD

I was called November 8, 1906, and found the little patient in the following condition: Coughing incessantly, very restless, facial expression indicating acute pain. Temperature 99½° F., pulse weak, so rapid it could not be counted, breathing rapid and difficult, left lung badly engorged, rales indicating congestion, right lung normal; bowels and kidneys torpid. Had been sick three or four days. In view of the circumstances and conditions I felt that I had a hard case with the chances against us. However, we went to work and won out—thanks to the alkaloids.

I cannot give dosage, as I did not note same; and can only name medicines used, adjusting the dose as best I could, watching effect. I ordered a cotton jacket to the chest, smeared with vaseline and lightly sprinkled with cayenne pepper, gave calcium sulphide, also calcidin, calomel with aromatics, intestinal antiseptics, mouth and throat wash of menthol compound, aconitine as indicated, also heart tonic same. In addition to all that I made a solution of emetine and ammonium benzoate and gave every hour or two. Used castor oil when needed for bowels.

W. C. Frazier.

Carrizo Springs, Tex.

—:o:—

The alkaloidal man is a fighter! The galenic-nihilist might be excused for giving up a case like this. But "our kind"—never!—Ed.

PNEUMONIA AND OTHER THINGS

I would not be without Clinical Medicine. It has been my guide for two years now, and never has it led me astray. And so, as I like to pass a "good thing" along, I have persuaded my friend, Dr. —— to enter "the family" and assured him his dollar will return to him a hundred-fold with the first issue.

Although a youngster in alkaloidal therapeutics, I can "see the light" and will never turn back. Three weeks ago I had seven cases of croupous pneumonia on my hands. I gave them the clean out and keep clean treatment, fired my little granules into them, protected their chests externally, and behold the result:

Case 1. Sixteen months old; well in seven days.

Case 2. Nine months old; discharged cured in six days.

Case 3 and 4. Discharged cured in eleven days.

Case 5. Fifteen years old; discharged cured in fourteen days.

Cases 6 and 7. Cured in nine days.

Cases 1 and 3 had severe attacks of dyspnea on the second night and the parents called in another physician but strange to say when the counsel arrived, half an hour later (in case one; three-fourths of

an hour later in case two) the brassy, wheezy struggle for life had given away to pleasant dreams—if looks were any criterion—and calcidin, gr. 1-3 every four to six minutes in hot water turned the trick. The doctor confirmed my diagnosis of pneumonia in those two cases.

Shout it in tones that will pierce the auditory canal of every doctor, that calcidin is a life-saver, and not only a life-saver (as I have proven several times in croup) but it is a "beautifier of the beautiful." Five months ago an otherwise handsome young lady, fifteen years of age, called at my office and desired treatment for goiter. Her neck, she said, had enlarged so much in the last six weeks that her collars were all too small. I put her on triple arsenates and calx iodata, and although she is still under treatment the goiter had disappeared and her collars fit properly—this after about two months.

I could cite many more cases of cures, but as a writer I am a failure; and so, hoping that these lines may pierce the shell of some confirmed "galenic" and cause him to drop the methods of the second century, I remain

C. F. Whiteshield,

Harbor Springs, Mich.

—:o:—

Doctor, you are *not* a failure as a writer. We deny it! You have said the thing to be said—and well; so well, that we want you to come again and come often. Let us hear about some of those other cases. Help us to stir up the rest of "the boys" to tell their experiences with active-principle medication.—Ed.

A BYRON ROBINSON NUMBER

The January number of the *American Medical Compend* of Toledo is a "Byron Robinson number." The entire issue of the journal is given up to a remarkable series of papers, recording the original work by this well-known American investigator. Among the men who bear testimony and unite in well-deserved praise, are Nicholas Senn, Howard A. Kelly, Wm. J. Gillette, G. Frank Lydston, Joseph B. Bacon, Emory Lanphear, Alexander Hugh Ferguson, R. Matas, John A. Wyeth and W. A. Evans. These are only a few of the contributors.

This number is a tribute of respect and honor, on the occasion of Dr. Robinson's "silver jubilee," which may well make any man proud—and we know of no man who deserves it more than Byron Robinson. We believe no American has done so much original work in the field of surgical anatomy, especially that of the abdominal viscera, as he has. He has made thousands of autopsies, studying every subject with the most minute care, and his conclusions have in many respects been epoch-making. We gladly unite in this tribute of esteem, and congratulate the *Compend* on its enterprise in publishing this number. We hope that Dr. Robinson may celebrate, twenty-five years from now, a semi-centennial of equally and continuously splendid usefulness.

CREOSOTE A SPECIFIC FOR DIPLOCOCCUS

Some months ago the writer was asked to treat a case of several years' standing of prostatitis resulting from the use of a bicycle saddle that irritated the prostate of the rider. The subject was a man of about 35, in good health in every other respect. The remedies the writer had used with success in other cases, euarol and protargol locally and calcium sulphide internally, with the addition of calcidin, produced but little effect on the disease.

While in Chicago during the summer the man had an examination made of the discharge from the gland by one of the editors of Clinical Medicine, when it was found that diplococci were the germs keeping up the irritation in the gland, and the case came back to me again with a note from the editor. The patient was at once put on creosote, twenty tablets a day of 1-67 grain each, together with one grain of arbutin, 4 grains of calcidin and four granules of triple arsenates with nuclein. Locally, a weak solution of menthol

compound was used in tepid water on retiring.

In a very short time the discharges began to diminish till finally nothing but a small amount of mucus was seen. At this time he was careless one night and used water too hot for his injection, when an acute inflammation was set up, with much pain. For this he was advised to use a 16 ounce solution of katharmon which reduced the inflammation, and was occasionally used afterward. I can say that there has been no inflammation in the gland for more than a month, and he has passed through a siege of a severe cold in that time.

The writer has used creosote in several other cases of diplococcus invasion before this case, twice on himself for diplococcus laryngitis and in cases of diplococcus bronchitis. One case of a student, a year ago, may be mentioned. She bore evidences of going into consumption, severe cough, and copious discharges.

The microscope showed that the germs were diplococcus pneumoniæ instead of bacillus tuberculosis. She was put on creosote and triple arsenates with nuclein and for a time calcidin added. In two weeks she was free from the invasion and has had no return of it since. The writer believes that in creosote we have a specific for diplococcus invasion of the human system.

G. H. French.

Carbondale, Ill.

INCIPIENT PTERYGIUM

I have observed several times in your journal queries regarding treatment of incipient pterygium, concerning which permit me to say a few words.

While most authors advise operation, even at this stage, we may meet cases in which an operation would not be expedient or else the patient will not consent to it. And it is just here, I think, that physicians may err in refusing to treat their patients except surgically, for in many instances the patients object and the next we hear of them they are using some quack "absorption treatment," valuable time is lost and partial obscurity of vision is the result, thereby at last necessitating surgical interference when it could have been prevented by proper local medicinal treatment if it had been instituted when the patient was first seen.

I have successfully employed adrenalin chloride in the treatment of these cases, using strengths varying from 1-400 to 1-6,000. This is especially valuable when the growth is very vascular, pterygium crassum. Of course every physician is acquainted with the physiological effect of adrenalin when used locally in congested or hypertrophic conditions of the conjunctiva. It must be remembered that no good can be accomplished other than to allay the irritation, if such be present, if the pterygium has encroached upon the cornea or pupillary space, since the above treatment will not remove the growth but merely checks it and causes it to become thinner.

Where there is much irritation present, with photophobia, etc., it is often advantageous to flood the eye several times daily with some mild antiseptic collyrium, as bichloride of mercury, 1-5,000, or a 2 per cent solution of boric acid, at the same time employing a light wet compress for the first twenty-four hours.

L. L. Lamar.

Florence, Tex.

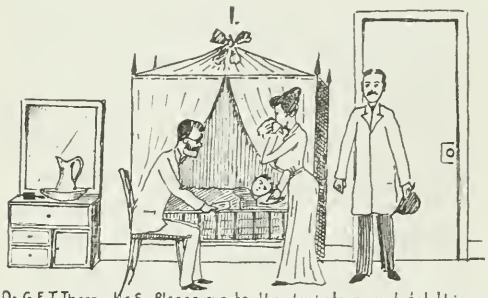
ANTISEPTICS—HOW OLD ARE THEY?

In the February number of your journal I find the following: "England discovers Intestinal Antiseptics." I find in looking over older writing that the discovery is not anything new. William Hillery, M. D., early in 1800, in a work on "Epidemical Diseases in the Island of Barbadoes," and republished in Philadelphia with notes by Benjamin Rush, M. D., in 1811, wrote the following on the treatment of yellow fever:

In speaking of the treatment at a certain stage of the disease he says, give "cooling acid juleps or other antiphlogistic and antiseptic medicines."

Again, "If the pulse begins to abate and sink lower, either on the third day or sooner, he must immediately begin to give antiseptic medicines."

"As the disease advances the putrescent state of the fluids increases if not prevented by the use of the antiseptic medicines."



Dr. G.E.T.There. Mr S. Please run to the drugstore and get this, but tell the druggist that I want an unopened bottle and of P.D.Qs. make.

"But after the third day when the pulse begins to sink it is absolutely necessary that both food and drink should be made more antiseptic."

"To put a stop to the putrescent disposition of the fluids and to prevent the gangrenes from coming on by suitable antiseptics."

The above proves conclusively that at that early day they used antiseptics for intestinal diseases, and when endorsed by Dr. Rush I think that it cannot be claimed as a new discovery, but another instance going to prove that some will rob the dead.

D. A. HOFFMAN.

Oskaloosa, Ia.

—:o:—

It is no doubt true that some of these old fellows saw the light away ahead of their times. We are too prone to think lightly of what our medical ancestors did. Nevertheless, the fact remains that the word "antisepsis" meant something different in those days from what it does now. Beujamin Rush and William Hillery knew nothing of bacteria. Pasteur gave this great fact to the world late in the nineteenth century, and it was some years after his discovery before any practical application was made of it. Sepsis in the olden times undoubtedly meant putrescence, which is not the conception which we have of the word now.

Of course we did not mean to intimate in our editorial that England had heard of intestinal antisepsis for the first time last month or last year. What we did mean to intimate was that they are grasping the importance of that factor in disease over there right now, perhaps even more strongly than are our leaders on this side of the Atlantic.—ED.

MORE FROM DR. G. E. T. THERE

The pictures further illustrating the career of our good friend Dr. G. E. T. These are again illuminating. They carry a very striking moral, in view of the discussion of the relative advantages of prescribing and dispensing. By the way, Doctor, have you sent in *your* contribution on this question? We have a very

Dr. Did not have P.D.Qs! Sent this instead. Hm! Just as always. Well we will have to try this anyhow. But to be on the safe side I wish you to go to P? Drugstore and get me a bottle of Abbott's Calcidin.

interesting discussion of the subject in this department this month. Better get into it. We want to hear from as many as possible.

FACIAL ERYSIPELAS

On page 199 of the February issue you give the treatment for facial erysipelas, as pilocarpine, etc. But I am sure you would not give this unless temperature was high and skin hot and dry. My brother had the disease last summer, with temperature but little above normal. It spread over his entire face and part of his head. I used big doses of tincture of iron chloride with glycerin internally; antiphlogistine ex-

ternally. This, with the "clean-out" method, effected a quick and complete cure. If his fever had been high, with hot, dry skin, I should have surely used the pilocarpine.

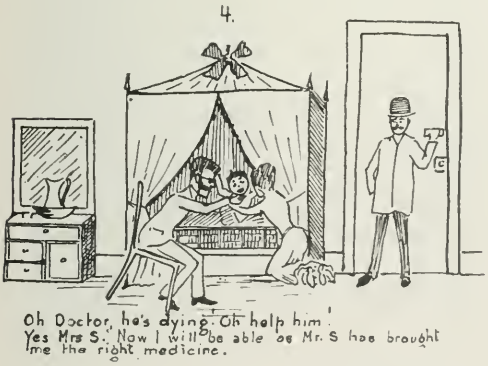
T. A. COGSWELL.

Swaledale, Ia.

—:o:—

Of course pilocarpine is not to be used or recommended in all cases of erysipelas.

Here comes the nicety of the alkaloidal method, for we urge our readers to study their cases and adapt their medication to the exact condition—never under any consideration to give a "cut-and-dried" treatment for a disease.



In such mild cases of erysipelas as you describe, in all probability a thorough cleaning out of the bowels and an antiseptic and protective dressing would have answered the purpose. If you follow the CLINIC'S teaching closely you will remember that in sthenic cases of erysipelas, that is, those with high tension pulse, febrile reaction and marked local inflammation, we usually recommend pilocarpine; while in asthenic cases we prefer the tincture of iron. Suitable local treatment, as 50 per cent ichthyol or

5
Well Mr S. your boy is out of danger now If he gets another attack give him 3 of these Calcidin tablets in warm water and his attack will soon be over Good night Mr. S.

painting with pure carbolic acid to be neutralized with alcohol, is always indicated —ED.

UTERINE HEMORRHAGES DURING LATE PREGNANCY

Under this heading I want to report a number of cases which have come under my observation, illustrating the usefulness of hydrastine hydrochloride in these accidents. Now, as we all know, uterine hemorrhages during pregnancy and the

6.
As soon as I get home I will send in an order for one of these $22.00 cases No more nights like this one for me And after this I will dispense my own medicines and be able to do what I want A full line of alkaloidals for this M.D. Sola!

puerperium are the source of not a little anxiety to the accoucheur, as well as to the patient's family. And well they may cause alarm, for the authorities all recognize

their seriousness. I have at least demonstrated to my own satisfaction that conservatism in these cases, as against radical interference, is a virtue well worth cultivating. Of course, if a complete placenta previa or concealed hemorrhage exists, delay might be the cause of a fatal termination. But if the child shows the usual signs of life it is best in its interest to watch, wait and give hydrastine hydrochloride.

Case 1. Mrs. G., age 25, eight months pregnant, sent for me. She was flowing profusely with contractions every fifteen minutes. Examination revealed nothing in the way of complications. Being in a Catholic family, delivery with the loss of the child would have been a most heinous offense. I have been enjoined repeatedly by the parish priest to save a child, even if I must do a Cesarean section. The Catholic faith does not consider it justifiable to destroy a soul, even though saving it would put the mother's life in jeopardy. I was in a quandary, for did not the authorities say to deliver in excessive hemorrhages. However, I disregarded their teaching in this instance and gave hydrastine hydrochloride, gr. 1-8, and morphine sulphate, gr. 1-8, atropine, gr. 1-250, every two hours till the hemorrhage was checked, which occurred after giving three doses. I stayed all night. In the morning the pains had ceased, the child showed evidence of life and I left instructions to give the medicine every four hours for a day unless the hemorrhages recurred. Just one month later I delivered a nine-pound boy.

Case 2. Mrs. N., multipara, began to flow moderately in the seventh month of pregnancy. I could not give her morphine, as she possessed a marked idiosyncrasy for that drug, when given by the mouth. It invariably throws her into violent stomach and intestinal contractions. So I gave her hydrastine hydrochloride, gr. 1-8 every two hours till hemorrhage was checked. She stayed in bed two days and went to full term.

Case 3. Mrs. S., young and delicate, about six months pregnant. Took a railway journey and started to flow profusely. She managed to get home but was quite exhausted. I was called and found os not dilated. Hydrastine and morphine checked the flow somewhat but did not lessen the pains, which continued. I stayed with the hope of averting a miscarriage, but had to forcibly dilate under anesthesia and deliver the next day. She was very weak but rallied under stimulation with strychnine and glonoin.

Case 4. Mrs. V. had been sewing all day and suddenly started to flow profusely. I was called and was very anxious that things should go right in that case as it was in a new locality for me. Upon examination I found no complications. The family and friends present had known of similar cases that had been treated by forcible delivery with bad results for the child, so they expected me to advise delivery. The os not showing signs of ready dilation I advised the hydrastine-morphine-atropine treatment. My reputation was at stake in this case, as they had never heard of hesitancy in similar cases. I, however, stayed all night and gave the drugs as in previous cases. The hemorrhage ceased and the following day, twenty-four hours later, labor began and a probably two-weeks' premature child was born.

These few cases show that hydrastine hydrochloride, with muscular sedatives, is of benefit in these cases, providing, of course, one is not too hasty about leaving them. Case 3 is an apparent contradiction of its utility, but one cannot always tell whether other means were not used to bring about a miscarriage. Of course a perfect history is not always procurable in these cases. One thing is certain, the above results have enhanced my reputation as a safe accoucheur in these parts.

LUCIUS H. ZEUCH.

Wheatfield, Ind.

—:o:—

The doctor's observation concerning the value of hydrastine hydrochloride in these always serious and often dangerous cases of hemorrhage is an exceedingly interesting one. While we have found this remedy useful in uterine oozings, though we prefer

hydrastinine in such cases, in the more copious flows our preference has been for atropine, with glonoin for immediate effect when an emergency existed. But the excellent results secured by Dr. Zeuch open up a new and larger field for inquiry. We hope that such of our readers as have had experience along this line will send in their reports.—Ed.

THE AUTOMATIC DIAGNOSTICIAN

When a lad the doctor had been called a mechanical genius. He was forever tinkering with wheels and screws and rivets and things. In fact, some of his companions used to call him "wheels," which term, we are informed by noted alienists, if not synonymous with "genius" is close enough to express the idea. When he became a doctor it is not impossible the world lost a first-class machinist. As the data for judging whether or not the world gained a first-class doctor when he graduated are not readily at hand, it would be idle to speculate about it. Be that as it may, after years of study and work he invented the "automatic diagnostician," which if it does not rank with Harvey's and Jenner's discoveries and the discovery of appendicitis, at least crowds them a close second.

As the doctor emerged from his office he bore in his hand an oblong leather case with a brass clasp, and stepping into his auto sped away. Arriving at the number from which he had received the call, he carefully lifted the oblong leather case with the brass clasp and made his way to the bed-side of the sick man.

"Hello, Doc! am I very bad?" was the greeting from the patient.

"It's likely you wish to inquire if you are very ill; we will shortly ascertain," replied the doctor depositing the oblong leather case with the brass clasp on the floor.

"I feel like thunder," continued the patient. "Vomited a lot of yellowish, greenish, bitter stuff; had an awful headache, just like gouging my eyes out. Then I had to vomit. Couldn't keep anything on my stomach, not even clam chowder. I guess I'm about all in. What do you think, Doc?"

"We will now determine exactly what your trouble is. This instrument thinks for me," answered the doctor.

"God!" said the patient.

From the oblong leather case with the brass clasp the doctor carefully lifted the automatic diagnostician, a complicated combination of tubes, bulbs, balls, thermometers, gauges, etc., etc., all connected and evidently constructed to operate correlatively.

Ordering the patient to lie flat on his back, the complete apparatus was carefully adjusted over him, each bulb, ball, thermometer, bearing or what-not being placed in relation to the patient's anatomy best adapted for receiving results.

"You will lie perfectly still and think of nothing," said the doctor.

"All right, Doc," said the patient. "I'll not forget you if you pull me out of this."

The respiratory mouthpiece was carefully adjusted, rendering further conversation impossible. Then the doctor adjusted his glasses and scanned the readings on the large dial-plate of the diagnostician. The indicators flew around in lively fashion, giving the following readings: Pulse 79—full. Temperature normal. Respiration 18. Transpiration excessive. Tongue foul; bowels constipated—17,486,000 bacteria, made up of 47 varieties, in colon. Pancreas congested. Area of liver dulness enlarged.

"Ouch!" said the patient blowing out the respiratory mouth-piece. "What in time is that boring into my leg?"

"Be quiet, sir. I neglected to tell you that that is only a needle prick for the blood count. It will not hurt much. Ah! here it is now," and the doctor read: "Leucocytes and red corpuscles normal. Widal negative."

"Say, Doc," asked the patient at this point, "How much does it cost so far?"

The doctor rubbed his chin reflectively and said: "If you will place a dollar in

the slot of the apparatus we can then proceed."

"All right. Please hand me my trousers," and being handed the bifurcated germent the patient fished out the coin and put it in the indicated slot. There was a buzz, a rattle, a snap, and a card came out on which was printed: "Acute bilious attack. Chronic irritation of liver. Chronic constipation. Autotoxemia."

The doctor's face cleared as he read the card. "Just as I expected," said he.

"How is it, Doc, all right?" asked the patient.

"Why I think so," said the doctor. "With certain mental reservations, which are the inalienable right of every doctor who has practised more than a year, I think I may venture the statement that we know exactly what ails you, thanks to this wonderful instrument."

"Well, what can we do for it?" asked the patient anxiously, thereby establishing a cummunity of interest between the machine, himself and the doctor, highly creditable to the doctor.

"If you will place another dollar in the slot I think we may proceed along ethical lines."

"Very well, please hand me my trousers again," and the patient extracted another dollar. After the buzz, the snap and the rattle another card came out.

The doctor read and swiftly prepared the following: "Calomel and podophyllin, 1-6 grain of each every half hour till six doses are taken. Follow in the morning with a tablespoonful of phosphate of sodium in hot water. Repeat two nights, then every third night bilein and pancreatin comp., two half-hour after meals."

As he folded and replaced the automatic diagnostician in the oblong leather case with the brass clasp, the doctor said:

"It is an encouraging fact that in some cases, treatment has kept pace with modern expert diagnosis. In your case the medicines used might be taken by some to indicate that treatment had not improved during the last thirty years. Such, however, is not the case. The medicines, though old, happen to be all you require. Tomorrow noon you will feel weak and badly. In the afternoon you will feel much better. The next morning you will be as good as new."

"Jes so," said the patient. "Hand me my trousers, Doc."

"I beg your pardon," said the doctor with stiff dignity, "The fees are all paid and I will now bid you good day." And he departed, carefully bearing the automatic diagnostician safely packed in the oblong leather case with the brass clasp.

A. H. Southwick.

Limestone, N. Y.

—:o:—

It is a pity that this automatic thinking machine can not be placed in the hands of a large number of our profession. To say nothing of its exceedingly astute diagnostic powers its treatment is good—very good.—Ed.

FORMIC ACID AS A THERAPEUTIC AGENT

In the *Journal of the American Medical Association*, April 28, 1906, was published an article by Dr. Heinrich Stern, of New York City, entitled "Sixteen Years' Experience with Formic Acid as a Therapeutic Agent." This paper had been read in the Section on Pharmacology and Therapeutics of the American Medical Association, July, 1905. The article attracted my attention, as it presents a new therapeutic measure for the treatment of pulmonary tuberculosis.

Dr. Stern has used it in a series of more than eight hundred cases, and it is the only drug that has given him positive results, curing or improving over seventy per cent of all his cases. He employs a solution of iodine in formic acid: Formic acid, 60 grams, iodine 5 grams. This is a saturated solution and should be made without heat.

As he did not describe fully his method of administration in tuberculosis, I wrote him, asking for further directions. He replied as follows: "Internally I have not

employed the preparation as extensively as subcutaneously, or rather intramuscularly. I prefer the gluteal region for the injection. I generally start with 5 minims of the injection, and increase slowly to 10 and even 15 minims. The first three to five injections are made on succeeding days, the others following every third, fourth or fifth day, as the case may be. The internal administration of the solution is followed by increased appetite, disappearance of night sweats, and increased strength."

Dr. Stern, also, insisted upon a suitable diet, especially the "yolk-cure," devised by him and described in the *Medical Record*, December, 1904.

In the only case in which I attempted the subcutaneous injection of the formic acid-iodine solution, it caused so much pain that I made no further attempts, but administered the remedy internally, well diluted with water. The result was very satisfactory.

As our editors, Drs. Abbott and Waugh, took part in the discussion of Dr. Stern's paper when presented, we would be glad to hear further from them on this subject, or from any of the readers of THE AMERICAN JOURNAL OF CLINICAL MEDICINE who may have had experience with formic acid as a therapeutic agent.

HENDERY ALLISON.

Kingsville, Texas.

—:o:—

We had called editorial attention to the important paper by Dr. Stern. Before we read it this acid had attracted our attention, and on page 668 of our journal for May last, will be found a translation from a French paper upon the same subject. It is certainly deserving of study and trial, and we are very glad to receive your report upon it.

In regard to the pain caused by its hypodermic injection, permit me to make two suggestions: One is that pain is not developed so markedly when injections are made deep into the muscle as when they are subcutaneous. The other is a procedure we have found useful in preventing the pain of thiosinamin injections: Take up your solution into the hypodermic syringe, and then draw in a few drops of 2 per cent cocaine solution, injecting immediately. The cocaine prevents the pain very nicely.

We trust that any of our readers who have made trial of this promising therapeutic agent, will give us reports upon it. —ED.

GOOD OPENING IN WASHINGTON

A middle-aged married physician of any school is wanted to locate in the vicinity of and associate himself with a young physician in a sawmill and farming country. This is a good opportunity for some elderly physician to escape the rigors of the eastern climate and have a home in a beautiful section of the state of Washington. Address (giving full particulars) "Washington," care of THE AMERICAN JOURNAL OF CLINICAL MEDICINE.

CINERARIA MARITIMA IN CATARACT. QUINSY

It has been quite a few years since I have written an article of any nature for the medical press, feeling that others more competent would occupy the space with greater benefit to the readers of the journal. But as experience with Cineraria maritima for cataract is requested I will give my experience.

A young man with a capsulo-lenticular cataract of the left eye, so completely obscuring the sight that a sign with eighteen-inch letters could not be read across the street, with the right eye closed, when I began the use of cineraria (Luyties) twice a day; at the end of three weeks' treatment the cataract was so far dissolved that he could read ordinary print. Unfortunately my patient left my town and I was prevented from knowing the final end. I was prompted to make a trial of the remedy by the favorable reports given over the signatures of Drs. L. M. Allen, W. G. Hillig, H. C. Moor and J. A. Dailey.

My success in this case warrants me in a further trial. Others may accept the report of Dr. A. E. Bulson, Jr., if they like, "that it is absolutely worthless."

I will give my treatment in a recent case of quinsy: Boy six years of age, both tonsils affected. Treatment: Calomel and saline laxative to clean out. Magnesium sulphate solution, hot, as sponge-bath to entire body each night, to open the pores and stimulate capillary circulation. Mentho-pyrodole with hydrozone, properly diluted with boiled water, used with atomizer every hour. Double sulphide (composed of sulphur, sulphide of magnesium and calcium and a little sugar, which seems to hold it as a sulphide) given in grain doses to saturation, then four times a day. Nuclein tablets, two every ten minutes until six doses are taken, then every two hours until well.

I also apply carbolized epsom-salt solution constantly about the throat—compress saturated with it. This manner of treatment has never failed to bring the desired result. In the case mentioned there was no suppuration. In positive rheumatic cases I add rhus tox. to each dose of nuclein. I am not sure but in the majority of cases nuclein alone, properly pushed, will answer all purposes, after the cleaning out and sponging has been thoroughly attended to.

A. J. Rogers.

Kincaid, Kans.

ADRENALIN IN ASTHMA

The experience of Dr. M. G. Price with adrenalin solution in asthma, as related in the January journal, is of particular interest to me. I lately tried hypodermic injections of eight minims 1-1000 adrenalin solution in a patient who has been a sufferer for years. The remedy was used in two attacks and with very gratifying results, relief being almost immediate. The only untoward symptoms developing were discomfort in the cardiac region and trembling of the limbs. There were no unpleasant after effects.

I should like to know the experience of others with this remedy in relieving attacks of asthma. Is it safe? If so it should surely displace the morphine-atropine injections.

J. C. Condit.

Windsor, Calif.

THE SUCCESSFUL TREATMENT OF ASTHMA

I have treated numerous cases of asthma with the following granules, and to make a long story short I will only mention the treatment given, which had a marvelously quick action in curing the affection:

Calcidin .....grs. 24
Strychnine arsenate (gr. 1-134) 30
Hyoscyamine amor. (gr. 1-250) 24
Lobelin (gr. 1-12) 24
Hot water .....ozs. 3

Let this stand until cool and give a teaspoonful every half hour until the patient is relieved, then every hour or two for a few days, then if the attack is over, drop this medicine and begin with two granules of strychnine arsenate, gr. 1-30, four times a day for six weeks or more and your patient will be cured. This is a specific treatment for all cases not due to affections of the heart. Let the Clinic readers try it and report.

W. F. Radue.

Union Hill, N. J.

PASSING THE WASHINGTON BOARD

I am pleased to inform you that I have at last heard from the Washington State Board of Medical Examiners. I will credit them with more intelligence than I could at my last writing. One of their questions on therapeutics was: "Name the remedies you would use in pneumonia." I outlined the treatment in its different stages and to my surprise I got a mark of 88 per cent on the paper. They must have approved of the remedies, for I only had ten minutes on the last three questions and I know I left out some important points in answer to them. They are very exacting and one must be about perfect to make any showing with them. I thought I was entitled to 100 per cent on obstetrics and diseases of

women and they give me 75 per cent. But after all, I have reason to rejoice, as they have signified my right to practice. I wish the CLINIC would give the correct answers to some of the questions on the last-named subject. I shall send the questions on a separate sheet.

It may be interesting to some of the readers of CLINICAL MEDICINE to know something of the condition of wages out here. A waitress in a restaurant gets $8.00 a week and board. A plumber gets $5.00 a day of eight hours, and puts in most of the time coming and going. A carpenter gets $4.50 a day. A painter or paper-hanger gets $4.00 a day. A doctor gets $2.00 for an office call, $5.00 for a complete examination, $5.00 for an x-ray, $5.00 for an anesthetic, $25 for normal labor and subsequent call, $50 for abnormal labor, $200 for laparotomy, $20 for luxation of thumb, $10 for amputation of a finger. Office rent ranges from $25 to $100 per month on Riverside Ave. A regular physician waits a month after examination for returns. The druggists, the "corn doctors," the medical-institute treaters of "diseases of men," and other of this ilk do the work of the profession.

The wholesale druggists have a hard and fast rule not to sell to the doctors, and the retail druggist reserves the right to substitute a proprietary remedy for your prescription, even in your presence. If you inform him he has no right to prescribe medicines he informs you that they are "patent medicines." I am in favor of sending him to the state prison. What does the CLINIC say? If I may not prescribe a remedy I know the action of until examined, why should he be allowed to prescribe that of which he knows not the contents or the action of it? We have osteopaths, Christian scientists, massagers, medical institutes and corn doctors practising medicine here unmolested.

F. S. FISH.

Spokane, Wash.

—:o:—

Following this comment we print the questions sent by Dr. Fish. Anyone who is contemplating a removal to Washington can spend a profitable hour in writing out the correct answers. Sorry *we* haven't space for them.

Labor conditions in Spokane are much the same as they are in Chicago, but the doctors average a little better, if they can get it! The counter-prescribing druggist has become a serious problem. These things are being done constantly, everywhere, and yet some people wonder why the doctor will dispense! The wonder to us is that sensible men continue to divide their scanty earnings with men like these druggists. Do you?—ED.

HERE ARE THE QUESTIONS

1. Define presentation and position. Give three examples of each. Which of the latter is most common?

2. Which is the greatest diameter of the female pelvis, also that of the fetal head? Give the mechanism of rotation of the latter during parturition in the first position.

3. At what time of gestation is the placenta formed? How would you treat inevitable abortion subsequent to its formation?

4. In difficult labor, upon what would you base your decision as to whether Cesarean section or the application of forceps would be the proper procedure?

5. What is placenta previa? Name the different attachments of the placenta in the same. Give the method of management.

6. Give symptoms and diagnosis of ectopic gestation.

7. Give the common causes of subinvolution of the uterus and the treatment of each.

8. Define metrorrhagia. Name two of its most common causes prior to the menopause. What would you suspect should it occur subsequent to the same? How would you verify your suspicion?

9. Give your treatment of a recent attack of specific vaginitis. Name two of its most common sequelæ.

10. Give two indications for hysterectomy. Which do you prefer, vaginal

or abdominal? State upon what grounds you would base your preference.

[The old fellows say the examination in medicine was severe. So say I of chemistry. —F. S. F.]

JUST AN EXPRESSION OF OPINION

The latest issue of CLINICAL MEDICINE arrived yesterday. I beg to comment on this number, because I feel that "honor to whom honor" and "tribute to whom tribute is due" are just as applicable today as ever. I am sure that many a young man in the profession feels very grateful to you today—as *I* do. But, lest his timidity prevent him from doing so, I want to express my gratefulness to you.

The cause of all this is your published reply to the ill advised (perhaps) and faltering doctor, who stumbled so miserably in his treatment of his case of typhoid. We, in Pittsburg and vicinity, by reason of the great prevalence of this disease and the large number of cases we see in a year, think we ought to know more about its treatment than anybody else. I say *we*, and yet I do not feel that I can conscientiously include myself, because I am just completing my first year in practice, after serving half a year as resident physician in one of our large hospitals in Pittsburg. I have had in this year (1906) four cases that ran their course and two cases of aborted typhoid. In none of the four that ran their course did I have to direct either means or medicine at the temperature, because it was so low as not to inconvenience the patient in the least.

I clean out the *primæ viæ* with calomel, podophyllin and bilein followed by saline repeated every alternate day until the feces lose their odor, and this occurs about the third day with the intestinal antiseptic (sulphocarbolates); and if pain in the abdomen appears, copper arsenite, grain 1-250 every three or four hours, forever puts an end to that in twenty-four to thirty-six hours. Stimulants and predigested beef or bovinine for diet, with fruit juice occasionally.

I have one patient whose temperature has been normal or slightly below for a week, who swears he has not been sick except the day before and the first day that I saw him; and yet I found him with a temperature of 104°F., and he has presented a typical case of typhoid. I have never given a thing nor done anything directly intended to reduce the temperature.

Doctor, your letter to that man is a gem. I want to thank you and say I am sure many a man will drink in every word as he would the nectar of the gods. Please don't think of publishing this! I am perhaps too young in the profession to be quoted.

M. U. S.

——, Pennsylvania.

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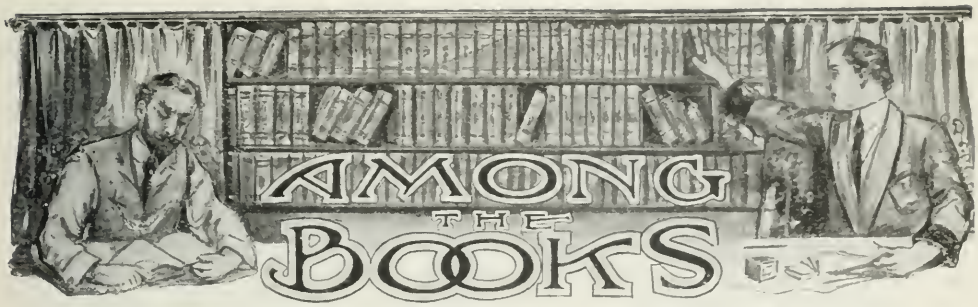
The one who answered the "faltering doctor" hopes that there is a great amount of truth in your closing paragraph. Many and many a hesitating young practician who read that answer has boldly started out on the only therapeutic road which leads to success. We note the results you have obtained in your six typhoid cases and can honestly assure you that just such a report will probably be made when you have treated six hundred cases. The man who cleans out the *primæ viæ*, keeps it clear, supports the patient's vitality and meets pathological conditions as they arise, need never talk about the "fixed course which the disease must run." Notwithstanding your uncalled for modesty we publish your communication for the sake of commenting thereon; but, Doctor, believe us, it is just such honest outspoken communications as these which lead us to continually look forward and onward and stiffen our backbone under the constant shower of vituperation and sneering abuse we have to march through. It is hard indeed to push down the "idols in the grove," and the "high priests of medicine" very much object to being taught, having occupied the position of supreme mentors so long. Notwithstanding all this, truth must prevail and the one positive method of therapeutics become accepted.—ED.



STEVENSON'S "PHOTOSCOPY"

Photoscopy, by Mark D. Stevenson, M. D. Illustrated, Publishers, W. B. Saunders & Co., Philadelphia and London. 1906. $1.25.

As an aid to determine the amount of refraction-error, the size and movement of the lighted area reflected from the fundus of the eye, after it has been thrown on it by a mirror, is utilized. This very useful aid is excellently detailed and illustrated in this clearly written and printed book of but 112 octavo pages. The name "Photoscopy," looking at the light, rather than the usually used term, "Skiascopy," looking at the shadow, or "Retinoscopy," looking at the retina, is applied to the operation by the author, and though an innovation, it is, we think, a very acceptable one in the interest of good scientific terminology. For the few pages in chapter V which the author devotes to the history and name of this ophthalmic help, we owe the author special thanks from a literary point.

HIRST'S "OBSTETRICS"

A Text-Book of Obstetrics, by Barton Cooke Hirst, M. D., Professor in the University of Pennsylvaia. Fifth edition, revised and enlarged, with 767 illustrations, 40 of them in colors. W. B. Saunders & Company, Philadelphia and London, 1906, $5.00.

A book that is in its fifth edition since 1898, besides several more reprints, bears its own witness of efficiency. We find no better words to characterize this fifth edition than those of the author's brief preface to the fifth edition: "The author has carefully revised this edition, paying particular attention to the recent advances in our recent information regarding puerperal infection and gestational toxemia, but incorporating in the text only the facts that seem at present clearly established."

It goes without saying that a teacher like Prof. Hirst feels the responsibility of his oral and written teachings, knowing that they will be converted into the practical service at the bed side and often at a critical moment. "Be not many masters for, etc., etc." (James 3:1.)

CLEAVES' "LIGHT ENERGY"

Light Energy, Its Physics, Physiological Action and Therapeutic Application, by Margaret A. Cleaves, M. D. With Numerous Illustrations. Published by the Rebman Co., New York and London, 1904. Price, $5.00.

We are not too late in reviewing this comprehensive book on the energy of light. Only last October we read a review of it in the *Wiener Medizinische Wochenschrift*, No. 42, where Dr. Freund pronounces a high encomium on the work, as "enriching the literature of phototherapeutics." And it certainly does so. In its 811 pages of 9½ by 6 inches, closely but clearly printed matter, with 55 illustrations, the author gives a wealth of information and original exposition of the doctrines, theories and therapeutic usefulness of light, all the varied sources from which it is derived and the various ways in which it is applied; information which a specialist like the author

alone can gather from hundreds of volumes at an immense expenditure of time and labor. The author presents the digest of years of study, experiment and practice. There is no book we know of on the subject, which approaches so near being an exhaustive encyclopedia of the subject of light.

LYDSTON'S "POKER JIM"

Poker Jim and other Tales and Sketches, by G. Frank Lydston, M. D., Monarch Book Co., Chicago. $1.00.

How comes "Poker Jim" among these book reviews? For two reasons: First, our friend Prof. Lydston wrote it; second, the short, pithy, racy, nakedly-natural stories which are included in the volume are sure to interest every red-blooded man or woman, even those of our readers whose days move along in the elongated, narrow, spiceless, dressed-up artificialities of conventional life. They are sure to give a "stretching-out" relief for their benumbed moral extremities. Then, too, we are told by old-timers in California that they give a picture of western life which every man who has lived it will recognize as vividly true. Dr. Lydston is a truly great literary artist. Every physician should read everything which he writes.

ASHTON'S "GYNECOLOGY"

The Practice of Gyneoclogy. A Text-Book for Practitioners and Students, by W. Easterly Ashton, M. D., LL. D., Professor in the Medico-Chirurgical College of Philadelphia. Third edition, thoroughly revised. W. B. Saunders & Co., Philadelphia and London, $6.50, 1906.

It is not because our women have become more gynecologically sick, nor that the number of physicians has become more than usually alarming, nor for any other similar reason, that Ashton's Text-Book of Gynecology has lived to see two unchanged editions in the first six months of its publication, and that now, within a year, the untiring author and teacher of this specialty has found himself in conscience bound to give his widely spread reading class a third and this time thoroughly revised edition of his generally accepted text-book. If a reason must be given for this extraordinary success we might venture to give: (1) the teachable character of it, which does not assume a knowledge of details in the reader and gives them from A to Z; (2), and this is especially true of this third edition, the author gives every new method and treatment in his specialty as he has tried it, personally, and as he has found it, not hesitating to abandon his own and adopting someone's else when better. These are qualities which put conscience above professional egotism, for which we feel to say, "God bless you!" to the author.

MORTON'S "ESSENTIALS OF MEDICAL ELECTRICITY"

Essentials of Medical Electricity, by Dr. E. R. Morton, of the London Hospital. Well illustrated. London, Henry Kimpton. Chicago, W. T. Keener & Co., 1905, $1.50.

A sufficient little book for the beginner before he takes up more exhaustive treatises.

WARE'S "PLASTER OF PARIS AND HOW TO USE IT?"

This little book of 82 pages and a good index is a valuable monograph on an important subject of surgery, valuable because the result of a vast hospital and dispensary experience. It is written by Dr. Martin Ware, M. D., of New York, who gives in it everything in sufficient detail, where this means of immobilization is and where it is not applicable. Surgical text-books usually mention the subject, but not in sufficient detail to be practically useful. This monograph therefore supplies a real need. The following headings of the chapters will show its character: Chapter I, The Plaster of Paris Bandage. Chapter II, The Application of the Plaster of Paris Bandage to Individual Fractures. Chapter III, Fractures of the Upper Extremity. Chapter IV, Fractures of the Lower Extremity. Chap-

ter V, Molded Plaster of Paris Splints. Chapter VI, Plaster of Paris in Orthopedic Surgery. Chapter VII, Plaster of Paris in Dental Surgery.

Published by Surgery Publishing Co., 92 William Street, New York, 1905. $1.00.

[LUCKETT AND HORN'S "PARAFFIN IN SURGERY"

Since Gersuny suggested the prosthetic use of paraffin or vaseline, some five years ago, many articles have appeared on the subject in current medical journals, but very little has found its way into the text-books, so that the physician who wishes to inform himself concerning paraffin injections and the ways of using them will find it difficult to secure the data he needs unless he has access to a large medical library. This book fills the gap. While it is small, it gives practically all that is known on the subject Commencing with the history of paraffin prosthesis, it presents a careful study of the disposition of the paraffin in the tissues, gives a careful resumé of the chemistry of paraffin, the method of preparing it for injection, physical states influencing its final disposition, describes with detail the technic of making the injections, the indications for its use, possible dangers, and concludes with a series of illustrative cases.

The field of usefulness is quite large and includes, as the authors point out, two classes of cases: first, functional, and second, cosmetic improvements. Among the first are included insufficiency of the vesical and anal sphincters, prolapsus uteri, hernias of various kinds, support of varicose veins and of the artificial anus; in the second are included the filling up of depressed and disfiguring scars, sunken cheeks, saddle nose, cosmetic replacement after removal of testes or mammæ, etc. As will be seen, the expedient presents large possibilities, which are entirely within the reach of every intelligent physician. The technic is simple, and when used as described in this book, practically devoid of danger. We predict that every doctor who buys this book will be well satisfied with the investment. It is well illustrated.

Published by the Surgery Publishing Co., 92 William Street, New York. Price $2.00.

WALLIAN'S "RHYTHMOTHERAPY"

Rhythmotherapy, i. e., Physiologic and Therapeutic. Potency of Mechano-vital Vibrations, and a Dictionary of Diseases and Vibratory Therapeutics. Illustrated, fully and well. By Dr. T. S.Wallian,A.M., and member of a number of respectable societies. Published by The Quellette Press, Chicago. 1906. Price $1.50.

This is the abbreviated title, and an elaborated one would also fail to describe this racy volume, so we let it go by, merely saying: Get the volume, read, enjoy, and profit by it. It is not a fake, but an earnest one, pleasantly and racily written.

FANTUS' "PRESCRIPTION WRITING"

Essentials of Prescription-Writing. By Dr. Bernard Fantus, of several medical schools of Chicago. Chicago Medical Book Co., Chicago, 1906. $1.00.

All we have time and space to say is: This is a precious little volume, calculated to save the usual physician's honor, and goodness knows there is great need of it.

LUDY'S "ANSWERS TO PHARMACEUTICAL QUESTIONS"

By Dr. R. B. Ludy. Published by John Jos. McVey, Philadelphia, 1907. $1.50.

Dr. R. B. Ludy, the "author," does not seem to be the author of this valuable book of answers to pharmaceutical questions prescribed by state boards, for its "special authors" are Dr. Charles Platt of London, England, who furnishes the parts of "Theoretical Chemistry," and "Toxicology and Posology," and Dr. M. Clayton Thrush, who furnishes "Pharmacy." "Materia Medica" and "Botany."

This book of 287 octavo pages, and an excellent index of 16 pages, is not one from which to learn these sciences, but from

which to ascertain whether or not memory has retained what the mind has learned of them. The "special authors" have done a specially fine work, which is bound to be of immense assistance to the candidate of pharmacy, whose anxiety before a state examination may and often is in disproportion to his real knowledge and ability. Cheek is, of course, a practical demand of all candidates of this twentieth century, but it is usually in inverse proportion to honestly acquired knowledge and skill. And state boards are not always composed of psychologically cultured minds on whose friendliness an honest but timid scholar can reckon. We have a right, therefore, in saying that this fine work of Drs. Thrush and Platt is designed to give a stay and confidence to a worthy pharmaceutical candidate as no work of that kind which has recently come to our reviewing desk. The scientific and practically skilful meet so often in the real pharmacist's labors of today that the writer of these lines was often struck with the amount of learning there is involved in some of the questions and answers of this book.

UNIVERSITY OF CHICAGO PRESS "MANUAL OF STYLE"

Nearly every American doctor thinks he can write pretty good English, but he does not know how little he really knows about it until he has become a medical editor and has to prepare "copy" for the press. By the time he has secured even passable uniformity in punctuation, spelling, capitalization, paragraphing, the use of technical terms, all the thousands of little details which never even occurred to him before, he has acquired a great respect for this language of ours. A book like this is a great help. While in many respects the "style" is different from that employed in the CLINIC office, it is so good that we purchased a number of copies for our own proofreaders, and heartily recommend its use to our readers, especially to thos who write occasionally for publication—as everyone should. The price is but 50 cents, or 55 cents post paid. The University of Chicago Press, Chicago.

SAUNDERS' FORMULARY

Saunders' Pocket Medical Formulary, containing a multitude of formulæ for various diseases, internal and external, and all information and calculations a physician needs in his practice. Compiled by W. M. Powell, M. D. Eighth edition, 1906. W. B. Saunders Co., 1906, Philadelphia and London, $1.75.

This volume is finely thumb-indexed, soft leather bound, with tuck. A marvel of cheapness.

PRACTICAL MEDICINE SERIES, VOL. X

Practical Medicine Series, Vol. X. Publishers, The Year Book Publishing Co., Chicago, 1906, $1.25, contains the following departments:

Skin and Venereal Diseases, by Prof. William L. Baum, of the Chicago Post-Graduate School. An important account of the new treatments.

Nervous and Mental Diseases by Profs. H. T. Patrick and Wm. Healy of the Chicago Polyclinic, give us important new and old methods in the diagnosis and treatments of these ever-eluding and vexing diseases which afflict more and more of human kind.

We cannot forbear, after looking through the above four volumes, urging our readers, if they wish to keep up with the advance in the science and arts of medicine to adopt this series of monthly volumes as their informants.

HIRSCH'S "GENITO-URINARY DISEASES"

A Compend of Genito-Urinary Diseases and Syphilis including their Surgery and Treatment, by Dr. Chas. I. Hirsch of Jefferson Medical College Hospital. Illustrated. $1.00. Philadelphia, P. Blakiston's Son & Co., 1906.

This is one of Blakiston's excellent "Quiz-Compends."

CONDENSED · QUERIES · ANSWERED

PLEASE NOTE

While the editors make replies to these queries as they are able, they are very far from wishing to monopolize the stage and would be pleased to hear from any reader who can furnish further and better information. Moreover, we would urge those seeking advice to report the results, whether good or bad. In all cases please give the number of the query when writing anything concerning it. Positively no attention paid to anonymous letters.

ANSWERS TO QUERIES

ANSWER TO QUERY 5145.—I have a case in point. On the twenty-seventh of last month I attended Mrs. L. in her second confinement. Erysipelas was epidemic in her neighborhood. Fearing a possible infection I thought it proper to keep her well saturated with calcium sulphide for a number of days. By mere accident I made inquiry as to her former milk supply, which she said was almost nothing and that she had to raise her child on the bottle. I did not then know that this drug was in question as to its influence upon the milk glands.

I counted out eight or nine days' supply of one-grain calcium sulphide tablets, two to be taken every two hours during the day till they were all taken. Thinking that they were to make milk she took them faithfully. The milk came in freely on time and now nearly a month she still has it in abundance. Hence I should ask, did calcium sulphide in this case reverse its effects on lacteal glands and cause the increased flow of milk or did the expectancy of the mother, influenced by strong suggestion, cause it? Which?

J. R. CHATHAM.

Olive Branch, Ill.

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ANSWER TO QUERY 5202.—For years I have been a reader of the CLINIC, now THE AMERICAN JOURNAL OF CLINICAL MEDICINE, and I am a firm believer in the alkaloids. I never have spoken and now wish to make one suggestion. Ask the good brother of Query 5202 to take his patient to a specialist very familiar with "higher prisms," and have him treat those eyes. And lo!—we await results. A. E. HUTCHINSON.

Victor, Colo.

QUERIES

QUERY 5204.—"An Assortment of Nevi." Some time since I wrote you in regard to some cases of so-called "birth mark." You asked me to send photographs. I have secured a photograph of *one* of them which you will find enclosed. This case is one of a young lady about twenty-two years of age, a teacher in the public schools. The marks which you see are deep red, not elevated, and disfigure the face very much indeed. I want the best, safest and surest method of relieving this young lady. Case 2. A little girl, four years, almost the entire side of face involved, pale red, extending up into the hair. When angered at any time it is noticed that it becomes redder; not elevated at all. Case 3. A boy baby, one year old. A berry of cherry red on cheek, much elevated. Failed to get photograph of last two. What can I do for these unfortunate people?

P. W. B., Kentucky.

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The photograph shows a simple nevus—port-wine stain. The baby seems to have a more serious form, *nevus vascularis;* the best thing to do here is to dissect out the growths, tying each vessel as you proceed, and watching carefully for the large vessel which usually is found at the base

of the nevus. If care is used the operation is almost bloodless and a few stitches will serve to draw the edges of cavity together—or you may allow the wound to heal up from the bottom, grafting skin on area as soon as granulations are level with surrounding skin. Electrolysis is without question the next best means for destroying nevi. A scar, however, remains. Any good work upon electro-therapeutics will give you the technic. Neiswanger's book is excellent. The dermal caustic, cantharidal blister or glacial acetic acid will serve to remove simple—and small—nevi. In each case the affected (pigmented) skin is destroyed and the new growth is not affected. In using the acids (nitric or acetic) apply row after row of dots thus:

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with a glass rod. Repeat as needed. Or you may tattoo the area with a solution of zinc chloride, thirty parts, distilled water, forty parts. In five days the scars fall off and the skin underneath may be anointed with simple cerate. Electrolysis (multiple puncture) may be used here also. You may also "cross hatch" with a sharp knife and dress with an ointment of suprenalin. In infants where the nevus is superficial paint with collodion to which 10 per cent of ichthyol has been added. This I have found most satisfactory.—Ed.

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Query 5205.—"Thiosinamin in Urethral Stricture." I should like to know by the way of your more every-day valuable paper, how urethral stricture should be treated by thiosinamin? J. A., Maine.

Thiosinamin can be exhibited to the individual in either one of two ways: gr. 1-2, gradually increased to grs. 1 1-2, may be given twice daily in capsule or diluted alcoholic menstruum, or one to two grains may be injected parenchymatously or subcutaneously in a glycero-aqueous solution every third day. It makes no particular difference whether the patient is being treated for stricture, lupus, cicatrices or corneal opacity. The manner of exhibiting thiosinamin remains the same. A very good formula is on the market in pill form, containing methylene blue, papain, thiosinamin, cubebs, etc. This formula is used in gonorrhea, cystitis, stricture, etc., and the writer has lately used a somewhat similar formula per os and injected into the urethra an ointment containing lanolin and caroid with pepsin. This unquestionably acts upon the abnormal tissue. We will at an early date present an article upon this subject. In the meantime, if you have a distinct fibrous stricture to deal with give thiosinamin in reasonable dosage for some time and practise gradual dilation. Exhibit twice a week the following ointment; pepsin ten grains, caroid ten grains, ichthyol one-half dram, lanolin and resin cerate, of each one-half ounce. Definite formulæ for the use of thiosinamin are as follows: Thiosinamin fifteen grains, milk sugar one dram, made into sixty capsules; use twice daily, increasing by one capsule until twelve are taken daily. Do not give at night. Second; thiosinamin twenty grains, glycerin 100 minims, water 100 minims. Inject ten to fifteen drops into the triceps or gluteus every third day.—Ed.

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Query 5206.—"Peculiar Toxemic Eruption." Female, aged 27, single, rather anemic, much thinner than formerly. About six weeks ago her ankles began to swell and get red. Under the red area there came lumps about the size of a nickel—hard lumps that were only tender on firm pressure. No pain anywhere, no discomfort except feeling of heaviness in limbs on walking. Treatment: Rest, limbs elevated, calomel clean-out, diuretics and antirheumatics: she is getting better, but too slowly. H. L. I., Michigan.

We regret that you failed to give us sufficient clinical data to enable us to make a diagnosis. There is probably retention of uric acid and autotoxemia from retained fecal matter. Send a specimen of urine (four ounces from the entire amount passed in twenty-four hours, stating amount passed) and carefully examine pelvic organs, note any menstrual derangement and particularly examine for displacement of uterus.

State number of stools, character of same, occupation, possibility of specific infection or tubercular taint. Urticaria and herpes would seem to be excluded.—Ed.

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Query 5207.—"The Stubborn Corn." I have tried the preparation for corns in several cases; had directions followed exactly and in no case has the patient been able to "lift out" the offending callus. Does the powder, with you, harden into a semi-stone when wet? That *I* have, has done so in each case instead of forming (as I supposed was right) a paste.

C. D. C., Montana.

We have great success with this formula but the material must be applied properly and thoroughly and the "soaking of the corn" ultimately must be thoroughly done. Bear in mind, Doctor, that there are corns and corns and some people seem to refuse to part with their callosities gracefully. In applying the "corn cure" the corn should be scraped or rubbed with pumice and the corn cure applied freely and a little piece of wet gauze placed around the toe, then a bandage applied. If it is possible to keep the application on during the day time, so much better. If not, keep it on all night every night for a week or ten days, renewing, of course, each night. At the end of that time soak the feet in very hot water or better still a hot solution of epsom salt, one ounce to the quart, lifting up the corn around the edges, and it will come out like a carrot in nine cases out of ten. If it does not, apply the following prescription: Collodion (freshly made) one ounce; extract of cannabis indica ten grains, salicylic acid 1-2 dram. Mix. Apply morning and night, layer over layer, until the corn loosens, then lift the entire mass away and pack the cavity with resin cerate. We have never yet seen a corn that this would not remove.—Ed.

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Query 5208.—"Formula: Syr. Partridgeberry Comp.; Elix. Helonin." Kindly send me formula for syr. partridgeberry comp., as listed on page 1205, seventeenth edition American Dispensatory; also formula elix. helonin comp. A. B.

We herewith give you the formulæ you desire.

1. Syrup partridgeberry comp. Take 3½ fl. oz. fl. ext. mitchella comp. and 6 fl. oz. water, filter and dissolve in filtrate 14 ounces (av.) of sugar, or make an extract of the drugs and, to quantity stated, add water and sugar to make five pints. This is an eclectic preparation. Dose dr. 1-4. (Fenner's Formulary). American Dispensatory: "Take of partridgeberry sixteen troy ounces, helonias root, high cranberry bark, blue cohosh root, four ounces each; grind and mix together; place the whole, one and three-quarter pounds, in a vessel, cover them with fourth proof brandy and macerate for three days. Transfer to percolator and add, gradually, brandy until three pints of tincture have been obtained, which reserve. Then continue percolation with water until liquid passes tasteless; add two pounds of refined sugar and evaporate by gentle heat to five pints; remove from fire, add reserved three pints of spirituous tr. and flavor with ess. of sassafras. Dose 2 to 4 drams. t. i. d."

2. Elix. helonias comp.: Mitchella, 2 oz. av.; crampbark 1 oz. av.; blue cohosh, oz. 1; unicorn root (helonias) oz. 1 (av); elixir, percolating menstruum, q. s. (about 20 fl. oz.); sugar 5 ozs. (av); soluble elix. flav. fl. oz. 1. Make by percolation as usual. Dose, drs. 1 to 2. Fenner.

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Query 5209.—"Shreds in Morning Urine." I was instructed as a medical student that gonorrhea should not be considered as cured as long as shreds continue to appear in the morning urine. Authors that I have been able to read seem to ignore this condition. Most medical men with whom I have talked, act as though they were ignorant on the subject, while others admit that the condition exists but place no importance to it. I cannot believe that an urethra has returned to its normal state as long as shreds, threads and flocculi are seen in the urine. I have had very little, if any, cleaning up the urethra, and I would like to appeal to the Clinic "family" for their opinion and

how they treat such cases. Is it enough to consider gonorrhea cured when all visible discharge has stopped? Should we give our consent to a man to marry who has this chronic condition as shown by shreds in his urine?

At present I have a case on hand where all discharge from the urethra has stopped, but the first four ounces of the morning urine passed in a glass is very cloudy and full of shreds. The balance of urine passed in another glass is perfectly clear. This would indicate to me that only the anterior urethra was infected if it was not for the fact that the patient has had prostatitis on two or three occasions. The present treatment is calcium sulphide and hyoscyamine.

H. W. E., Philippine Islands.

We publish your question in full to bring out ideas from the profession at large. Shreds, or "tripperfaden," in the urine always indicate urethral disease and your views are perfectly correct. Lydston, Fuller and Taylor fully discuss this subject in their respective works. Let us suggest that you give your patient internally one of the "antiblennorrhagic No. 2" granules (calcium sulphide, gr. 1-6; camphor monobromated, gr. 1-6; hyoscyamine amorphous, gr. 1-5000; methylene blue, gr. 1-6) every four hours and arbutin gr. 1 four times—or even oftener daily. For one week give also calcium sulphide, gr. 1-6 every two hours, and we think you will have perfectly clear urine in two weeks. Sometimes, however, irrigation of the bladder is essential. In other cases copious irrigations of deep urethra with thalline sulphate solutions or potassium permanganate solution will be required. The urethroscope will reveal the condition of the deep urethra and the presence or absence of eroded areas. Look out for infected lacunæ magnæ.—Ed.

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Query 5210.—"Arsenic Poisoning from Paper." Dec., 10, 1906, a paper hanger came to my office with red spots on his feet, hands and face the size of a twenty-five cent piece. He complained of a "burning sensation of the flesh" where these red spots were and when he would breath cold air, his nose and throat would burn. He said the paper was full of dust, the paper was old and had been long in stock. Eight or nine years ago, while papering a room with the same paper, he had a breaking out like the present, but not so bad. So I guess he must be suffering from arsenical poison. He is now all swollen, his face, hands and feet from hips to toes; big red spots also on hands and face, teeth loose, mouth and throat sore, mucous membrane of nose quite sore.

Please tell me what to do as I have never had such a case. Tell me what the results will be.

R. D. B., Oregon.

You describe a very clear case of severe arsenical poisoning. The best treatment here would be as follows: The patient must receive alkaline diuretics and eliminants to full effect after the stomach and intestine have been thoroughly washed out. Use stomach tube carefully as you cannot tell how great the involvement of gastric mucosa is. Have your druggist make up some fresh ferric hydroxide, wash out stomach well then throw in the hydrated iron oxide and after ten minutes wash this out. Give also high enemata of warm saline solution. Have the man take a bath in a solution of epsom salt (epsom salts one ounce, water one quart) and wash out nose and throat with same mixture three times daily. Now give him a few doses of castor oil and three times daily five grains of vegetable charcoal. Arbutin, gr. 1, barosmin, gr 1-6, with a glass of barley water every three hours for three days will clear the kidneys. Feed him on milk, eggs and starchy foods for one week and let him drink albumen water (white of egg in a glass of water) between meals. He must change his work; get him out of doors. By following these measures you will soon have the man well. Campho-menthol may be used to spray nares and fauces if very sensitive; use it after washing out with the magnesium suplhate solution.—Ed.

QUERY 5211.—"Shaller's Rule of Dosage." Would it not be well when Shaller's rule for aconitine applies to mark the alkaloidal granule, "Shaller's rule applies?"

R. S. W., Kentucky.

Shaller's rule (One granule for each year of the child's age and "one for the glass" to twenty-four teaspoonfuls of water. One teaspoonful half hour or hourly "to effect."), Doctor, applies only for very young children and with a very few potent alkaloids. The fundamental alkaloidal principle, however, "the smallest minimum effective dose at short intervals *to effect*—remedial *or* physiological"—will always bring a man through safely. Aconitine, perhaps, is the one drug calling for an additional safeguard and we, personally, have long since ceased to regard aconitine with dread. Of course when you are dealing with very helpless and young children you must be quite sure that you do not allow overdose and here "the *smallest* effective dose oft repeated" proves our salvation. We know that two granules in the course of eight or twelve hours cannot possibly hurt the child, and we make a solution (two granules to 15 to 24 drams) and order one teaspoonful half hourly or hourly until fever falls and skin moistens or we come again, which we certainly ought to do in such a case within twelve hours. As at the same time we have instituted the "clean out" treatment and ordered proper local measures and adjuvant medication generally, we ought to find a marked improvement on our second visit and in nine cases out of ten much less than the full dose of aconitine for the individual under treatment will have done the therapeutic work.

Think this over carefully, Doctor, and grasp the great underlying fact and we feel sure that you will go on your way with a new grasp of positive medication.—ED.

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QUERY 5212.—"Malassimilation and General Debility." Young lady, 21, blonde, German, 5 feet 7 inches tall, weight 126 pounds when in usual health; menstruated at 16, has had painful menstruation most of the time since; time, three to four days, the less pain the more flow; flow about the average amount. Worked hard most of the time for last three years; engaged in sewing; long hours, often too little sleep, close application to business. Stomach has troubled off an on for six years, food being vomited soon or within an hour after eating or, if not vomited, passed as eaten. Of late not troubled so much, but stomach often sensitive after meals; at times squeamish, tongue coated at times with a brown coat, at other times clean; good color when at her best. Pain sometimes in one place and sometimes in another, often in left side at or near bend of transverse colon.

Bowels inclined to constipation, usually respond to a dose of salts in the morning before breakfast, pain across hips on each side of spine; tired feeling, very nervous and very sensitive the whole length of spine; flesh everywhere hyperesthetic; not able to sleep well. Troubled but little with gas or bloating; urine at times alkaline, at other times normal; no craving for sour stuff, not much desire for water. A peculiar symptom: When sewing she is not always able to put the needle where she wants to, it will hit to one side; but has no trouble walking a crack or standing with feet together with eyes closed. Cannot always control her feelings, especially if frightened. Have been treating her for some time for overwork—nerve exhaustion. I think her present condition has been brought about by overwork, sewing. Have tried to give her rest, nerve food, out-door exercise (as much as is consistent with her strength); have used cell salts, eliminants, salines, etc., etc., regulated the diet, but have not used hypnotics to any extent yet, but so far have not met with very flattering results. She will pick up for a week or so and look fine then without known cause take a backward start and keep on until we are put to our wits end to know cause or what to do next. The uterus admits a good sized probe readily and is of normal size and normally

located, regular, not to the day but seldom if ever skipping over a week. No signs of lues in family record.

Now, what is it and what is to be done?

F. R., Minnesota.

This girl presents a typical case of general debility; malassimilation and organic torpidity (with possibly, a wide-spread catarrhal involvement) being at the root of the trouble. Just so long as she continues to live as she does now you will be unable to cure her. Make her understand this and get her to promise to do what you want her to do for three months and she will be well—provided, that is, there are no organic abnormalities undiscovered. We would get at this case *first* in this way: Stop most indoor work; place the girl on light nutritious diet—a *little* every three hours. Beef juice, clam broth, grape juice, beaten eggs, whole wheat bread, broiled meat, etc., etc. Predigested cereal gruel at first, then, as stomach regains activity, simple cereal food. Oatmeal and bran water excellent. Have her take deep breathing exercise for three minutes morning and night and after a while begin a regular set of exercises. Daily salt sponge bath with friction after it. For first week a daily enema of warm salt solution. Before each meal quassin, hydrastin and juglandin, of each two. After eating papayotin compound three, diastase three. *With* her food give her ten drops of dil. nitrohydrochloric acid in a glass of water. This with cactin one on rising, at noon and bedtime will do much. Watch urine and stools and after one month meet indications.—Ed.

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Query 5213.—"Eruption." Mother of a large family, in good health, but has something like eczema on the middle finger. This has been since July. She has had two other doctors treating it a short time. One diagnosed it eczema. The other one had no name for it. I diagnosed it pompholyx. I have treated it for seven weeks. Symptoms: The entire finger save half of the inner side, is inflamed; a strip on the inner side the full length of the finger is in a healthy condition, or appears so. Now the fingers will swell up as large as two fingers, red and angry, with here and there a pustule, say three or four on the fingers; always soft; no induration or crust; does not itch, but a burning sensation like nettles, in the way she describes it. Some nights it hurts so bad she cannot sleep. I have healed it up five times, and the other two doctors once each. Now when it seems to be all well and in a healthy condition, the next day two or three pustules will manifest themselves, and the finger turns red and begins to inflame. Sometimes a red strip extends up the back of the hand as far as the wrist. The pustules come on quickly, are deep-seated, about the size of a shot, and in a few days are gone. I have looked after the diet, used antiseptics, tonics and so forth, and nearly all kinds of ointments. Lately I have been using zinc oxide ointment; it seems to do the best, but the affection returns in spite of all I do. Ichthyol ointment does not do any good. Antiphlogistine causes the trouble to disappear, but it will return in about ten days in spite of all. If you can suggest a line of treatment that may promise to be of benefit, please do so, and I shall send the money for it promptly. I am using a good many alkaloids in my practice and think well of them. Let me hear from you at your earliest convenience.

S. G. M., Ohio.

First, it is possible, although not likely, that there is here a local infection received from some unsuspected source, such as milking a cow with diseased udders.

Second, this may be of centric nervous origin, in which case your remedy will be the phosphide of zinc, gr. 1-6 four times a day, two hours before eating and the last thing on going to bed. This should be given for one week out of each month, and for the remainder of the month neurolecithin substituted, a tablet four times a day.

The third possibility is that there is an internal infection of the blood vessels or lymphatics of the finger, such as would occur

in milk-leg or any infective lymphangitis. In the latter case my suggestion would be the local use of a mercurial ointment, like that of red precipitate, applied with exceeding lightness; while internally she should take the powerful absorbent combination known as "antisyphilitic No. 2." I am very sorry this name has been given to this combination. While it is the most powerful antisyphilitic devised, its uses are so much wider than that, that there is danger of its being confined to specific diseases exclusively.—Ed.

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Query 5214.—"Heart Disease." My daughter, seventeen, good family and personal history, slight rheumatism once, had scarlet fever two years ago, a light attack without sequels. Following this her menstruation became frequent and profuse, but this was benefited by treatment. She was then taking music lessons, and spent much time practising and reading in a poorly ventilated and lighted room, with scarcely any outdoor exercise.

She became at the time very anemic, but this also improved under treatment. In September, 1906, I noted that her heart acted violently. The pulse was 130, loud and violent, with a rough systolic murmur indicating mitral insufficiency. Gallop rhythm. a distinct thrill over apex, heart dilated, extending to right and left, the murmur transmitted to the left and below the apex, but not to the neck. Second sound normal. Vascular pressure good, no edema. Hemoglobin 70 per cent. Since that time the heart has reduced in size, pulse 100 to 120, hemoglobin 70. She is weak, anemic, has poor appetite, her bowels are regular, urine scanty but without albumin. She has not menstruated for four months.

W. H. T., Indiana.

There is some endocarditis, due to rheumatism. I have so frequently seen such lesions disappear under treatment, at least every sign of them vanish, that I do not look upon such cases as hopeless by any means. My suggestion would be for you to treat her as follows:

In the first place make absolutely perfect the hygienic conditions of your home, or else send her to the seashore, the latter being preferable if the conditions are such that she will be comfortable and happy there. I prefer Atlantic City for many reasons. Empty her bowels in the usual manner, with a grain of calomel, during the evening, followed by saline laxative next morning, and after that keep them regular with a daily dose of saline. Give her arsenic iodide, gr. 1-67, before each meal and on going to bed. This is to melt out and carry off all of the cardiac deposit which is still intravascular and within reach of the circulation and the drugs carried by it. This I would continue for months, being careful to lessen the daily dose if irritation of the eyelids occurs. As both arsenic and iodide cause such irritation, this is a safer preparation than any other of either drug. Arsenic aids in causing fatty degeneration and absorption of morbid products. For her anemia I would advise iodide of iron, giving 1-12 grain with each dose of arsenic iodide. Her food should be easily digested and of nutritious kinds, namely milk, eggs, fish, oysters, chicken, and any other land birds, with fresh fruit juices. If you can give her milk warm from the cow, it is the best. If necessary she should have artificial digestants, the best being papayotin, of which she should take one grain at the beginning of each meal. I would not give anything else now for the menstrual trouble.

The only further suggestion I would make is that she be sponged with strong, hot salt water, every day, preferably just before going to bed. Sometimes a case like this does very well if sent to the city for a month's treatment.—Ed.

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Query 5215.—"Rosacea." Will you kindly publish in your query department, a treatment for rosacea. I have a case where the veins are permanently enlarged, the nose is very red especially under the irritating influences of heat and cold. It is not due to gastric disturbances, but simply a localized congestion of the blood

vessels. A local treatment is preferred. I have tried sulphur and ichthyol.

J. C. M., Iowa

We have your recent letter relative to the case of rosacea and have carefully noted the same. This disease is, as you are aware, a vasomotor reflex neurosis. It has not, as is usually thought, any connection with acne. Contrary to the general opinion, also, women are more frequently affected than men. Digestive disturbances, intestinal infection and pelvic congestions may cause the disorder. The free use of alcohol, strong tea and rich foods will often set up rosacea. In some instances exposure to extremes of temperature must be looked upon as the cause. Catarrh of the intestinal or gastric mucosa is quite often the causa causans. Tight lacing and the use of cosmetics are also undoubtedly frequently to blame. Given an individual who uses alcohol or tea to excess and who is exposed to the weather and we have a good subject for rosacea—especially if he be a sufferer from indigestion. The sedentary, dyspeptic woman, lacing tight and eating freely without selecting her diet, is also apt to seek relief from this affliction. The treatment it is evident must vary to meet conditions. First and foremost it is essential to clean out and keep clean the intestinal tract. We must see that there is proper elimination of waste and assimilation of selected nutritive material. The skin, in nearly all cases, requires stimulation, and dilation of the sphincter ani will, in many cases, give good results. Menstruation in the female will often be irregular and this feature will not infrequently cause us much trouble. It is desirable to stop the free use of fluids and place the patient upon a dry diet.

An illustrative treatment would be as follows: Give the patient gr. 1-2 of blue mass and soda with gr. 1-6 of juglandin every hour from 6 to 10 p. m. every third night for twelve days; a saline draught may be exhibited the first thing every morning. One of the dosimetric trinity granules, with ergotin one, may be given on rising, at noon, at 6 p. m., and on retiring. Half an hour prior to eating the patient should take strychnine arsenate, gr. 1-67, xanthoxylin, gr. 1-3, and hydrastine, gr. 1-6. After eating, papayotin, charcoal and soda one; or, if there be an insufficiency of HCl, three plain papayotin granules and ten drops of dil. nitrohydrochloric acid. For the first week ten grains of the sulphocarbolates will be given an hour later—with water. After a week substitute four sulphur compound granules. Of course this medication will be varied to suit particular conditions. Have the entire body sponged with a salt solution three times weekly and wash out the bowels as often with a similar solution. Give fruit, eggs, rare red meat and well cooked cereal food—brown bread especially useful. Barley water is a good beverage. No tea, coffee or alcohol. Stop smoking. Locally bathe the part at night with water as hot as is tolerable and add to it a good preparation of hamamelis. Or use a weak solution of ichthyol. Bathe for ten or fifteen minutes. This causes first dilation and later contraction of vessels. Then apply zinc sulph., potass. sulphuret, aa dr. 1: aqua rosae ad oz. 4. In the morning apply white precipitate ointment or an adrenalin ointment. The latter is excellent. Carbenzol may be used with good results, especially when inflammation is marked. Apply it as strong as is tolerable; when dilution is necessary use vaselin and lanolin, equal parts. The galvanic current has been found of service, the anode being placed over abdomen and cathode over affected area. Surgical procedures are rarely called for but in severe cases may be necessary; these will be found fully discussed in any good modern work upon skin diseases. Diseases of the Skin, by Jackson (Lea Bros.) is an excellent little work and should be in your library. In conclusion let us suggest, Doctor, that you carefully examine your patient, looking sharply for abnormalities; correct these and institute strict hygienic methods of living. Send us a four-ounce specimen of urine from twenty-four-hour output, stating amount passed in that time, and we can then form a good idea of eliminative conditions.—Ed.

QUERY 5216.—"Hysteria." Lady, 47, mother of six children, of whom the youngest one is only about two months old; had one miscarriage in early months of pregnancy, recovering from same uneventfully. Physically she is well and well preserved. Her sickness dates back about seven years. One day as she sat at the table eating, she began to shake as from a violent chill; following this she became dizzy, just as from intoxication. Even after she got to bed, she felt as though she would fall out. This condition has continued ever since, so to speak; there have been times, of course, when it has been more severe than at others. She is seldom able to walk or even sit on a chair without having something she can hold on to, otherwise she feels as if she will fall. It is a fact however that she does not fall. She has been treated by eight different physicians and has taken medicines by the gallon. She suffers from constipation, quite severely, and is very melancholic. Her domestic life is not very happy; she continually whimpers, and then at times her husband loses patience and scolds, and then of course she is sure to get a severe spell. The physician that has treated her has called it a nervous trouble, according to her statements. I believe it to be hysterical.

J. W. H., Michigan.

While I agree with you fully that this case is a neurosis, it is a question how far this aids us in the treatment. However, I will lay down the matter as it appeals to me from your description.

Let us begin with the constipation, for which I would advise seven anticonstipation granules (the alkaloidal formula) to be taken before each meal. Let this be aided by a single heaping teaspoonful of saline laxative, to be taken immediately on rising in a cupful of very cold water. Some griping should be produced, but not more than enough to show that the dose of the granules is sufficient to really arouse peristalsis; hence you may increase or lessen the number of granules as your observation shows to be judicious. It may be possible that at first the bowels will require something like a colonic flushing with soap suds to remove the collection. Following this and in fact during the use of these granules, she should have such a nerve tonic as her pulse tension indicates. If this is low, the pulse fluttering, the heart beats weak, give her strychnine valerianate, gr. 1-134 every three, two or one hour during the day, the object being to secure and maintain normal vascular tension. If, however, the pulse tension is normal but the heart still rapid, substitute for this sparteine, gr. 1-6, every four hours It is not likely that you would have excessive vascular tone. If you should, the remedy for her is one which will also directly relieve the tendency to melancholia, and that is cicutine hydrobromide, a granule every two, three or four hours. Should there be a slight tendency to fulness in the head, with the melancholia, you will, I am sure, get better results from the use of anemonin, a granule every two, three or four hours.

Finally, Doctor, if her sleep is not very sound, it will be greatly benefited by cypripedin, a grain three times a day, which may be taken with the anticonstipation granules. If she sleeps fairly well but wakes unrefreshed, her remedy is avenin, five granules in a glass of hot water on going to bed.

One other point you mention, which, although of the greatest importance, is not within the reach of our remedies—that of her domestic life. It would be of immense advantage if this lady could leave her home for one month while conditions were to be restored, when on her return with improvement in health and in happiness, there would be a very great alteration in the home conditions.—ED.

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QUERY 5217.—"A Question of Possible Infection." I delivered a woman yesterday of a six months' fetus. The woman had been well of variola six weeks. Fetus dead and had been several days. Was I liable to infection?

H. K. L., Arkansas.

It is hardly possible that you were liable to infection, the woman having recovered from variola six weeks, whereas according to your account the fetus had only been

dead some few days. Unfortunately you give us no idea as to the condition of fetus. Had it died from the virulence of the infection present in the mother it would have died during or shortly after the acute period of variola. In six weeks the virus would have left the system of the mother and as the circulation was the same in both cases it necessarily would be absent from the fetus also. Moreover, Doctor, a child at six months would not be liable to smallpox *in utero*. Another member of our staff to whom the question has been submitted says: "While I have heard of a variolous woman being delivered of a child suffering from smallpox, it seems to me extremely unlikely that at so long a period, subsequent to her recovery, a dead six months' fetus could be a source of danger. First, because the circulation of the child during this period is identical with that of the mother, and even if the child had the disease the poison would be neutralized at the same time and in the same degree as in the mother—so that if she could not give the disease, the fetus could not. Even supposing that the child died *in utero* during the attack of smallpox and remained dead *in utero* for six weeks (which is not at all likely), it is extremely unlikely that the parasite would survive in the dead body, since it certainly is not a saprophytic organism, but lives and reproduces in living bodies. I should therefore consider the chance of transmission under the circumstances very remote. Still another member of the faculty answers briefly to the question, "Was there possibility of infection?" "No!" We think that this covers the ground although, as we have already stated, we are sorry you did not give us some idea as to condition of fetus, absence or presence of any sign of disease, also, Doctor, some proof as to the death of the child "within a few days."—Ed.

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Query 5218.—"Sharp Tools+A Skilful Workman=Perfect Results!" I use the alkaloidal preparations largely, but to be honest with you, I have got to discontinue some of them for the reason that I do not find uniformity of strength in them. I refer to the following: cicutine, aconitine and (particularly) the anticonstipation pills. How do you account for it? Do I get old stock or what?

A. H. H., California.

We do not understand (*cannot* understand) how it is you fail to find "uniformity of strength" in the granules named! Aconitine, especially, is as positively "uniform" as any human preparation can be. We fear, Doctor, that you are still practising under the old-time rule of a certain dose to each individual instead of giving the "smallest known-to-be-effective dose to each individual at frequent intervals to effect—remedial or physiological results." We are continually harping upon this subject. The idea that the same dose of even the most potent and evenly acting remedy will produce similar results in each individual is preposterous. The 1-134th grain aconitine may effect A, and produce not the slightest effect upon B, and even A might be differently affected at different periods by the same dose. The only safe rule is that already given and the positive efficacy of the alkaloids will be demonstrated in each case. Always clean up and render active the intestinal mucosa and eliminative organs when giving a potent medicine and you will be astonished at the small amount (say of aconitine or cicutine) which will be required. The anticonstipation formula is "standard." The same amount of evenly active ingredients will be found in each granule, but different conditions in different patients call for entirely different doses. You do not get old stock; there is no old stock. If fifty or sixty thousand busy men get positive results daily from the use of these preparations you may rest assured, Doctor, that you are getting the same tools that they are using, and if you will use them as they should be used will get just as positive results.—Ed.

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Query 5219.—"Codeine in Coughs. The Pulse in Pregnancy." I have had very satisfactory results from the alkaloidal treatment in some severe cases of pneumonia following grippe, but codeine does not

give me satisfactory results in controlling the cough of pneumonia or bronchitis or ordinary colds. Perhaps you can suggest a mode of administration new to me, as I am rather a novice in alkaloidal treatment. I usually direct one tablet of codeine (1-6 grain) every hour to relieve cough. Should I combine it with any other drug, such as hyoscyamine, and should it be administered in tablet form or dissolved in warm water?

By the way, do you regard the pulse rate as a corroborative sign of pregnancy? I have a case in a respectable married woman, of nervous temperament, which makes me think. Catamenial flow has been absent for nearly four months; no morning sickness (but nausea occasionally during day) with obstinate constipation. She is now suffering with the grippe. Her pulse is about 100, sometimes less. I cannot detect any swelling of the abdomen. The general health was fair before the attack of grippe, which she has had for ten days. It will be four months and a half the fifteenth of this month since flow stopped. No tenderness in the iliac region or over ovaries. Only symptom I can recognize indicating pregnancy is the pulse. Would you "bet high" on that symptom only. What tests would you suggest?

J. S. B., Maryland.

There is a great difference in the reaction of people to codeine and then, again, codeine is not a powerful sedative, in fact, it is very mild—all too weak to throttle cough until the occasion for it has been removed by physiological medication. Think it over, Brother—that's the one idea: that the way to handle all coughs is to remove the cause so far as possible, and then use just enough sedative to check the bit that is left. See various papers on coughs and colds published in CLINICAL MEDICINE; they may be of help to you. Of course, at times one has to suppress cough and when this has to be done, it should be done with an unsparing hand. Emetine, hyoscyamine, sanguinarine nitrate, scillitin and a variety of other alterative, sedative and mucous stimulants could be added to codeine, heroin, morphine, etc., according to indication While some cough remedies of a typical nature are better dissolved in the mouth or given in solution, these we are talking about work no better when given this way, therefore, should be exhibited in the pleasantest and most convenient form and manner possible.

A reflex cough like that which is experienced by your presumably pregnant woman is usually best relieved by cicutine, either the straight alkaloid or the hydrobromide (the latter being more readily soluble)—sometimes by gelseminine. It is due to pressure by the growing fetus. The Buckley's uterine tonic formula is also a good one in these cases, as is also the uterine sedative and nervine. Study the formulæ and see how closely they meet the indications.

In all cases of pregnancy a saline should be used daily in sufficient dosage to produce one or two thinnish stools. Then practically no nausea will be experienced and kidney complications will almost invariably be avoided. In this case digitalin is indicated to cut the pulse down to where it belongs. And, by the way, digitalin or some other heart tonic is indicated in many coughs, especially those due to debility.

I would treat this woman as being pregnant and reserve my diagnosis a little bit. Dates are often forgotten and subjective as well as objective symptoms are often deceiving. If the patient proves not to be pregnant then it is a "general debility", the treatment for which is exactly the above, plus the triple arsenates with nuclein or sanguiferrin in liquid or tablet form in connection with food which should be thoroughly nourishing and liberal in quantity—not, however, enough so to overdo the matter through straining the powers of digestion. Elimination in all cases of pregnancy is especially important, so also is it in cases of general debility (often due to protracted cases of autotoxemia) and for that matter in all perversions of the normal state, either acute or chronic.—ED.

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QUERY 5220.—"Don't Charge for Medicines Used!" I am taking six medical journals and I think more of THE AMERICAN JOURNAL OF CLINICAL MEDICINE than

of all others combined, still I have never been able to use many of the alkaloids, as it seems impossible for me to get in the way of using them, while I have more confidence and faith in them than any other method. But how do you manage to give a few granules and charge your patient $1.00 for them without their thinking that you have overcharged them, after you have been giving four to six ounces of liquid for $1.00 or giving fifty large pills or tablets for $1.00. I do not know how to overcome this obstacle?

T. A. McN., Missouri.

Pardon us, Doctor, *we* never charge our patients for medicine at all. We charge them for our skill and time. The workman does not charge for the use of his tools. Surely, if you are called in a serious case of poisoning and know enough to give a hypodermic of apomorphine you do not base the value of your service upon the cost of the apomorphine used? You are an expert and have spent many thousands of dollars and many years of your life in familiarizing yourself with diseases and the remedies therefore. The ordinary doctor charges his patients altogether too small a fee. The writer has found it just as feasible to obtain three dollars as one dollar, and as a matter of fact finds his patients think a great deal more of his services. A thing which costs little is valued little as a rule, and if you are able to give value received do not be afraid that people will not willingly pay the charge. Of course, if a medical dolt sets himself up on the high-fee pedestal and administers gray powder and rhubarb and magnesia or something of that kind constantly and fails to relieve, he will soon starve, but the competent man who gives good service should get a reasonable remuneration, whether he exhibits three little granules or a pint of a nauseous pink or green solution. Think it over, Doctor, and you will see how absolutely preposterous it is to charge patients according to the amount of medicine given. If you have the confidence of your people, just explain to them that the value of the whole big bottle of medicine consists in the amount of active principle it contains and then show them the same amount of active principle in a granule. If they are dubious, just put one granule of glonoin on their tongue and they will never have any further kick. Moreover after a few months the results you obtain will fasten you firmly in the estimation of the public.—Ed.

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Query 5221.—"Negro Immunity to Appendicitis?" Is a negro immune to appendicitis. I have been practising medicine for forty years and never knew one to have it.

J. E. I., Missouri.

Off hand, we cannot recall a case of appendicitis in a negro, neither at the present moment do we remember reading of any such case, but, Doctor, as one of our staff sapiently remarks, "Did you ever hear of a negro having $500.00 to pay for an appendectomy?" The ordinary African has "belly-ache;" the Caucasian, with a large bank account has appendicitis. Perhaps that is the solution of the problem, but you have raised a really interesting question and we shall investigate the subject thoroughly. Perhaps readers of Clinical Medicine will give us their experiences? Like the gentleman from Missouri, "We want to be shown!" Seriously, there can be no good reason for the Americanized negro's escaping appendicular disorders. He has an appendix and abuses nature even as we do. The nearer nature the less danger of appendicitis, which is distinctly a disease of civilization.—Ed.

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Query 5222.—"Test For Pus in Urine." Please give in Clinical Medicine the best and most practical test for pus in the urine.

J. D. T., West Virginia.

The easiest test for pus in the urine is probably the addition of peroxide of hydrogen, which will cause foaming. Urine which contains pus develops a green color upon the addition of the solution of guaiac. This disappears as soon as the solution is heated. Add liquor potassæ to the deposit of pus and the sediment becomes ropy and later forms into a gelatenous mass, but after all the best evidence of pus in urine is the detection of pus corpuscles by the microscope.—Ed.

GELSEMININE pushed to eyelid droop will often stop malarial chills.

SORDES.—Mulligan says small doses of jaborandi will cause the disappearance of sordes.—E. T.

SCARLET FEVER.—At present writing the mortality here from scarlet fever is about one per cent of the cases reported.

GELSEMIUM.—Bloyer suggests trying gelsemium wherever the unstriped muscular fiber is painfully involved.—E. M. J.

HEMORRHOIDS.—Princehouse uses for hemorrhoids collinsonia and hamamelis, internally and locally, with benefit.—E. T.

FEAR is by all means the one thing that plays most havoc with the nervous system of the child — Zenner, *Cin. Lancet-Clinic.*

SURGICAL MUMPS.—In the *Columbus Medical Journal* for January Lanphear describes two cases of "surgical mumps."

TOO SERIOUS.—The fact is the medical man, in a general way, is taking himself altogether too seriously.—*Medical Standard.*

IN SYPHILIS when unable to take mercury Shoemaker advises stillingia, xanthoxylum, sanguinaria and taraxacum.—*Med. Bulletin.*

ECLAMPSIA.—Kidney decapsulation is advised for eclampsia. Why not remove the lower end of the rectum or amputate a breast?

JAMESTOWN EXPOSITION.—You might be getting ready to take in the Jamestown Exposition, opening April 26 and closing Nov. 30, this year.

BROMIDES AND SOLANINE.—Bromides having succeeded in strychnine poisoning (Ellingwood) it is worth while to give solanine a trial.

NATURE ABORTS DISEASE.—Does not nature itself sometimes abort disease? Do not diseases at times abort spontaneously?—French, *Boston M & S. Journal.*

BE BROAD MINDED.—Let us be generous and broad minded enough to meet men of all pathies to give and receive that which is demonstrated to be the best. The man who is not loyal to his brother physician is harder to find each day.—*The Medical Counselor.*

INSOMNIA is one of the chief curses of the medical man, an approach to which should be jealously guarded.—Sir James Crichton-Browne.

IN ARTERIAL SCLEROSIS Herringham (*B. M. J.*) thinks no drug approaches calomel, gr. 1 or 1-2 at bedtime at intervals, as an alterative.

NOT GOOD FOR INSOMNIA.—If you are looking for a remedy for insomnia don't look into the *Chicago Clinic and Pure Water Journal.*

STREPTOCOCCUS PNEUMONIA may simulate other diseases as well as lobar pneumonia—tuberculosis or typhoid.—McCaskey, *Medical Record.*

ACUTE RHINITIS.—For acute rhinitis Webley suggests gelsemium. In angina pectoris De Marr advises a single full dose of lobelia.—E. T.

CROUP.—Clendenin advises jaborandi and gelsemium in true croup (*Ellingwood's Therapeutist*). Try pilocarpine and gelseminine in full doses.

IN PELIOSIS RHEUMATICA after sodium salicylate had failed M. W. Williams found calcium lactate excellent, gr. 10 every three hours.—*B. M. J.*

SUMPTUARY LAWS.—Twelve men in a box always fail to agree on every violation of sumptuary enactments.—T. C. Minor, *Cin. Lancet-Clinic.*

TYPHOID HEMORRHAGE.—If any medicine by the mouth is used it should be benzosol or zinc sulphocarbolate or salol.—Earp, *Med. Council.*

SEMINAL LOSSES.—*Denver Medical Times* says hyoscine hydrobromide, gr. 1-100 at bedtime, sometimes acts well in preventing seminal losses.

BLONDE AND BRUNETTE.—The blonde tuberculous should stay in the North; only the brunettes do well in the sunny South, says Red Cross Notes.

CHLOROFORM AND HEAT LOSS.—Profound and prolonged anesthesia with chloroform always means loss of heat.—Gwathmey, *Int. Jour. Surgery.*

FOOD AND DRUGS LAW.—People are only beginning to realize the far-reaching import of the pure food and drugs law. The nostrum men are hard hit by it. One by one the state legislatures

are seconding the pure food and drugs law by additional restrictions on the sale of poisons without labels.

A GODSEND?—What did the drug journals have to occupy their pages before the pure food and drugs law came up?

LIMITATIONS.—The wise man knows his limitations and studies the best ways to get the most and best work out of himself.

HYOSCINE.—The hyoscine controversy seems to have opened some eyes to the possibilities awaiting exploitation of the alkaloids.

WANING INCOME.—For some good common sense on "The Doctor's Waning Income" see the *Medical Mirror* for February of this year.

SOUTH A FINE FIELD.—The enormous industrial development of the South will soon render it again the ideal location for the physician.

ALCOHOL.—Peruna now prints on each bottle the percentage of alcohol it contains. Good. Now, are the sales falling off or increasing?

INEBRIATES.—The *Association Journal* for February 23 contains one of Geo. F. Butler's fine articles, this one on the Treatment of Inebriates.

GROWIN'.—One of the things that please us is witnessing the steady growth of the *St. Louis Medical Review* since Millican took hold of it.

INFLUENZA.—For those who do not get the *Practitioner*, a good abstract of the symposium appears in the *St. Louis Medical Review* for Feb. 16.

RETENTION OF URINE.—For retention of urine Sunday gives hyoscyamine amorphous, gr. 1-250, every fifteen minutes.—*Ellingwood's Therapeutist.*

MORPHINE AND HYOSCINE AS DEPRESSANTS.—In classifying hyoscine and morphine as depressants one should hardly fail to add—in depressing doses.

POST-PARTUM HEMORRHAGE.—For post-partum hemorrhage Duke recommends compressing the abdominal aorta through the uterine wall.—*B. M. J.*

DECHLORINIZATION IN EPILEPSY.—C. H. Hughes says absolute dechlorinization is a disadvantage in epilepsy instead of a benefit; digestion requires salt.

SURPRISES COME.—Surprises never come singly—the *Lancet-Clinic* has a page of Cincinnati advertising and a paper by a Cincinnati doctor in one issue.

WHICH PAYS BEST?—Unremitting labor till one wears out and dies in five years, or temperance in work continued and faculties ripened for many years.

GOOD TO CIRCULATE.—The Illinois State Board of Health sends out useful pamphlets on the prevention, restriction and suppression of scarlet fever, diphtheria and typhoid fever, which are good things to have and to circulate among our patients.

A SERIES OF PRIZES.—*Albright's Office Practitioner* offers a series of prizes for papers on chosen topics for each month. Take 'em in, Doctor.

SUPPORTING REGIME.—The reaction against the supporting regime is rapidly becoming fixed and now we hear only of the minimum diet as the ideal standard.

VERATRUM IN TONSILLITIS.—A. L. Clark praises veratrum locally applied in tonsillitis (*Ellingwood's Therapeutist*). Woodward urges veratrum in asthma.

FAILURE OF SURGERY IN CANCER.—It must be obvious to every observer how miserably surgery has failed to give relief in cancer.—Bell, *Med. Record.*

CANCER AND MEAT.—Robert Bell attributes cancer to excess of meat, its decomposing products retained and absorbed from the colon.—*Medical Record.*

A SHAMPOO?—A St. Louis medical journal quotes a distinguished French physician as "Lucas Shampouniere." Better have your brains shampooed.

RESPIRATORY CATARRH.—Can an acute respiratory catarrh be caused by an invasion of tubercle bacilli that fail penetrate beyond the membranous surfaces?

TRY THIS.—Can anybody take any infectious ailment if he or she is previously saturated with calx sulphurata? Now is a good time to try and find out.

NARCOTICS.—It would be a grave error to assume that all narcotics that inhibit the activity of living cells act in the same way.—Spingarn, *Merck's Archives.*

ARTERIOSCLEROSIS.—The Vermont State Medical Society discussed arteriosclerosis in a learned and elegant manner, but they did not know about veratrine.

CASTRATION FOR RAPE.—Ewell (*Va. Med. Mo.*) makes a strong and sensible plea for castration as a penalty for rape, since the law and lynching both fail.

TYPHOID HEMORRHAGE.—I believe that intestinal antiseptics are advisable even when all evidence of hemorrhage has disappeared.—Earp, *Med. Council.*

TYPHOID FEVER.—Hite (*Va. Med. Mo.*) says that in typhoid fever the intestinal antiseptics are advised to control conditions but at the risk of increasing tympanites and predisposing to hemorrhages. We have used these remedies in typhoid for over twenty-five years and never witnessed or heard

of a case of either objection. Have any of our readers heard of anything of the sort?

MORPHINE A SEDATIVE.—Morphine is a "sedative" but then again, haven't you used it as a stimulant? Try it on a habitue who has abstained for a time.

WELCOME BACK.—It is pleasant for us old-timers to see that T. C. Minor has resumed work in the *Cincinnati Lancet-Clinic*. We never skipped his columns.

HYOSCINE ANESTHESIA.—The *Texas Courier-Record of Medicine*, Dr. Kibbie, gives a quiet, sensible comment on Wood's attack on hyoscine anesthesia. Dr. Wood might imitate its tone with advantage.

ABSTAINERS.—The Lehigh Valley Railroad requires all train and telegraph employees to be total abstainers. That is the road to travel by, for safety.

BARS TO PROGRESS.—*Red Cross Notes* says that prejudice, apathy, ignorance, selfishness and vested interests still exist as bars to sanitary progress. Also to medical?

STRAINED RELATIONS.—We begin to suspect that relations are strained between Philip Mills Jones and Winslow Anderson, from expressions in the latter's journal.

BE FAIR.—Whether you agree with a man or not, give his argument a fair hearing. It doesn't hurt us to know what our adversary may have to say for his side.

ATHLETES.—Collier does not think that athletes who pass large quantities of albumin after severe exertion should be compelled to give up such exercises.—*B. M. J.*

ANESTHESIA.—Of the hundreds of cases in which anesthetics are given in this city daily over fifty percent are shocked by the anesthetic.—Gwathmey, *Int. Jour. Surgery.*

GOOD OPENING.—We know of a first-class opening for a bright young doctor, up-to-date and a gentleman by birth and breeding, an elegant summer resort practice.

A GOOD JOURNAL.—The *Medical Fortnightly*; well edited, clean, scholarly; not too large, nor too often; good paper and clear type; material always of interest; take it.

OFFICIAL JOURNALS.—The Scope of the Official Journal is well considered by Fassett in a suggestive paper, reprinted from the Proceedings of the American Medical Editors Association. It is well worth sending for.

PROGRESSIVE MUSCULAR ATROPHY.—In the *Journal of Nervous and Mental Diseases* for last July there was a report by Archibald Church of a remarkable case of progressive muscular atrophy, with marked heredity extending through six to nine generations. We regret we have not the space to quote Dr. Church's description.

A REMARKABLE CASE.—In the *Medical Mirror* Lanphear records a remarkable case, and more remarkably for a surgeon gives the credit to nature instead of himself.

MALE STERILITY.—Edward Martin has relieved male sterility by transplanting the vasa so as to avoid the obstruction in the tail of the epididymis. —*Boston M. & S. J.*

SHOCK FROM ANESTHESIA—*Int. Jour. Surgery* for February has a suggestive paper on Shock from Anesthesia, by Gwathmey, anesthetist to many N. Y. hospitals.

PUNISHMENT.—Pestalozzi could punish without producing bitter feeling, for his pupils knew it was the hand of love that was laid upon them.—Zenner, *Lancet-Clinic.*

HEADACHE REMEDIES.—And now the users of headache remedies are kicking because they don't get the old effects, the makers employing less dangerous ingredients.

NO RELIABLE ANTISEPTIC.—Osler says we have no reliable intestinal antiseptic; we say we have one in the sulphocarbolates, but we have tried the remedy and he hasn't.

DEATHS OF DOCTORS.—Of 2,000 deaths of physicians recorded by the *J. A. M. A.* last year, 25 followed operations for appendicitis; 1 was ascribed to that malady.

SOLUBLE DIGITOXIN.—While Laumonier finds digalen satisfactory, Bordet objects to calling it soluble digitoxin, since that is an impossibility. Both confirm our views.

ACTION OF CALOMEL.—The action of calomel is almost entirely confined to the duodenum; aloin acts only on the descending colon and rectum.—Butler, *Med. Fortnightly.*

DIABETES AND AUTOINFECTION.—Gilbert and Lereboullet contribute to *Revue de Med.* a study of pancreatic diabetes caused by autoinfection. Read 'em out of the *A. M. A.*

GLONOIN AND BLOOD PRESSURE.—The sphygmomanometer shows that if glonoin reduces the blood pressure the former pressure returns in about half an hour.—Arnold, *Vt. Med. Mo.*

ANTHRAX CURED WITH ECHINACEA.—In *Ellingwood's Therapeutist* Lewis describes a case of anthrax cured by echinacea. Send for a copy and read it; it is well worth it.

TONSILLITIS.—In the *Texas Courier Record of Medicine* M. W. C. Frazier tells of his success with tonsillitis treated with calx sulphurata, cleaning out, and intestinal antiseptics.

CHEAP OPIUM.—China taking steps to stop the opium habit, the Indian opium will be thrown

upon the general market. It contains less than one-half the morphine of Turkish opium, but that doesn't worry the maker of galenics does it?

THE IDEAL ANESTHETIC—Gwathmey said the ideal anesthetic of the future would be either scopolamine-morphine or cocaine locally, plus a little pulmonary anesthetic.—*I. J. S.*

PROGRESS.—Every important progress in our art has consisted in the accomplishment of that which but yesterday was declared impossible.—French, *Boston M. & S. Journal.*

STOPPING MORPHINE.—Without assistance it is beyond the power of human fortitude to stand the suffering incident to leaving off morphine.—Kenney, *Texas Cour. Rec. of Med.*

AMEBIC DYSENTERY.—In the *Texas Courier-Record of Medicine* for February J. W. Ellis reports a case of amebic dysentery cured by salines, and colonic flushing with quinine solution.

DISPENSING AND PROSPERITY—Despite the continued dispensing of drugs by physicians the *Western Druggist* finds that all branches of the drug trade shared in the general prosperity.

ASEPSIS.—In 5,000 tests Dœderlein found that even where gloves, masks, etc., were used, to insure asepsis, the bacteriologic tests were positive. All attempts at surgical asepsis are useless.

LOCAL ANESTHESIA.—The surgeon should avail himself of the most approved methods of local anesthesia whenever they can be used advantageously.—Tupper, *St. Louis Med. Rev.*

GOOD ARTICLE.—Send for the February *Chicago Clinic and Pure Water Journal* and read the article on How Charity Hospitals and Free Dispensaries Strangle the Physicians who Build them up.

ELLINGWOOD'S JOURNAL.—The number of good therapeutic points in Ellingwood's new journal is so great that justice to him compels us to refer you to it instead of seeking to quote all of them.

AMYL NITRITE.—Abrams attributes the effect of amyl nitrite in hemoptysis to stimulation of the longitudinal muscular fibers of the bronchi, demonstrated by Aufrecht.—*Lancet.*

HYOSCINE IN THE MORPHINE HABIT.—Since Hare advocated hyoscine in the morphine habit in doses up to gr. 1-4 each twenty-four hours, it cannot be so *very* dangerous in doses of gr. 1-33.

ALKALOIDAL MEDICATION.—There is no doubt that the principle of alkaloidal medication, with its exact strength of dose and preparation, is gaining ground more and more.—Achard, *Ill. Med. Journal.*

SPIGELIA.—An entirely unrelated product of extremely doubtful efficiency masqueraded successfully for many years before the drug expert as well as the drug dealer, as the genuine article and well nigh drove the latter out of commercial existence.—Stockberger, *Pharm. Rec.*

EUQUININE.—Rhames (*Merck's Arch.*) says that euquinine should largely replace the ordinary salt, the former presenting many advantages; and the trials made by the writer confirm this favorable view.

GONORRHEAL INFECTIONS.—Funny, is it not, how men bewail their inability to find a remedy for gonorrheal infections while they will not try calx sulphurata. Waiting for an earthquake to fall on them?

CONTAGION OR INFECTION.—Flick makes a plea for a more general use of the term "contagion," instead of "infection," as we now know that transmission is by actual contact in many cases formerly supposed to be through air.

TETANUS.—Just received a report from one of the first surgeons in the mid west of two cases of tetanus cured by the hyoscine-morphine-cactin tablets. If this keeps on those tablets will compel a revision of works on Practice.

ANGINA PECTORIS.—Fiessinger, assuming cardiac distention in true angina pectoris, treats it with success with digitalin in very small doses, adding theobromine to obviate vascular tension.—*B. M. J.* An uncertain and perilous therapy.

CALIFORNIA LICENSES.—California courts have decided that the manner of providing for the issue of licenses to physicians is unconstitutional, and mandated the board to license an army surgeon who had been refused.—*Pac. Med. Jour.*

CARBON BISULPHIDE IN PNEUMONIA.—Carbon bisulphide, absorbed into the blood, acts on the germs of pneumonia, destroying their vitality and neutralizing the toxins, says Masciangioli.—*Medical Record.* Well, then, give calx sulphurata a trial.

CRUDE DRUGS.—*American Medicine* speaks of the crude drugs that may be strictly official and yet worthless, and suggests that the charge should be investigated and denied *if false!* Gee whiz, Gould! Where have you been sleeping? Wake up!

ALCOHOL NOT NEEDED.—The disease that demands the use of alcoholics is a rarity, and he who prescribes them often portrays a deficiency in his therapeutics, or a sad incapacity to treat human ailments.—W. S. Leech, *Wis. Med. Recorder.*

RECIPROCITY—ALL OFF!—Reciprocity between the Indiana and Illinois State Boards has ended. The Indiana idea of reciprocity seems to be that Illinois shall accept her certificates without re-examination and she—Indiana—will accept those of Illinois with an examination.

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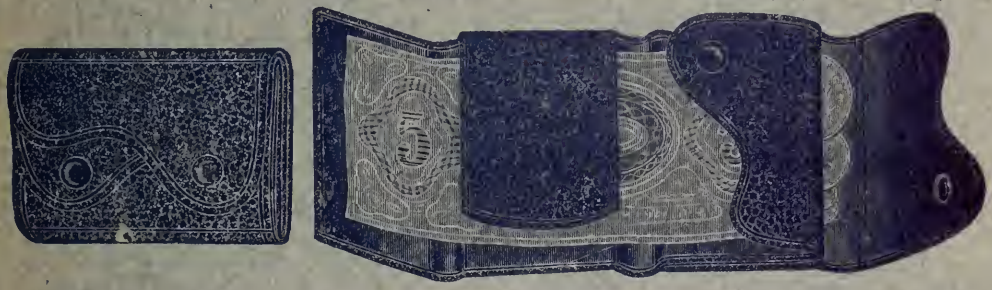

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